2150 – 2194 LAKE SHORE BOULEVARD WEST & 23 PARK LAWN ROAD

PROPOSED MIXED-USE DEVELOPMENT

TORONTO, ONTARIO

Urban Transportation Considerations

Official Plan Amendment Application

Volume 1: Executive Summary

Prepared For: CPPIB Park Lawn Canada Inc.
FCR (Park Lawn) LP

SEPTEMBER 2019

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I. INTRODUCTION

BA Group is retained by FCR (Park Lawn) LP and CPPIB Park Lawn Canada Inc. (herein referred to as “FCR”, “CPPIB”, or “the Client”) to provide urban transportation consulting services in relation to the redevelopment of the former Christies cookie factory site, comprising municipal addresses 2150-2194 Lake Shore Boulevard West and 23 Park Lawn Road (herein referred to as “the Site”, “the Christies Site”, or “the 2150 Lake Shore Site”). This transportation study has been prepared by BA Group on behalf of the Client, in support of an Official Plan Amendment application for the redevelopment of the Site. This document is also intended to provide input into the City’s Secondary Plan for the site and immediately adjacent lands.

The Site, which is located at the northeast quadrant of the Lake Shore Boulevard West / Park Lawn Road intersection in southeast Etobicoke, will be undergoing a City of Toronto-led Secondary Plan process to establish a comprehensive vision for both the Site and surrounding area.

The Site location is illustrated in **Figure 1.**

West Toronto, and specifically south Etobicoke, has been the subject of much City planning initiative to revitalize and redevelop the site-surrounding area including Humber Bay Shores and Mimico 20/20. Given it’s size and location, the Christies Site has a significant role to play in the future vision of this area, with a unique ability to influence not only the urban fabric of the Humber Bay Shores neighbourhood but the mobility patterns of the surrounding area.

Transportation is a key factor when considering the redevelopment of the Site and in resolving a number of long-standing weaknesses and challenges in the mobility network that currently support the Humber Bay Shores area and southern Etobicoke more generally, today.

FCR has been working in partner with the City of Toronto over the past three years to set the planning framework to establish a vision and future re-development Master Plan for the Christies Site, in coordination with the active planning work occurring in the site-surrounding area.

The Client and the City of Toronto recently reached a settlement with respect to the City of Toronto Official Plan Amendment No. 231 (herein referred to as “OPA 231”), a milestone achievement in moving forward for the Site. Both parties have been involved in settlement discussions since 2016.

This transportation study has been separated into three volumes as follows:

- **Volume 1: Executive Summary**
- **Volume 2: Technical Study**
- **Volume 3: Appendices**

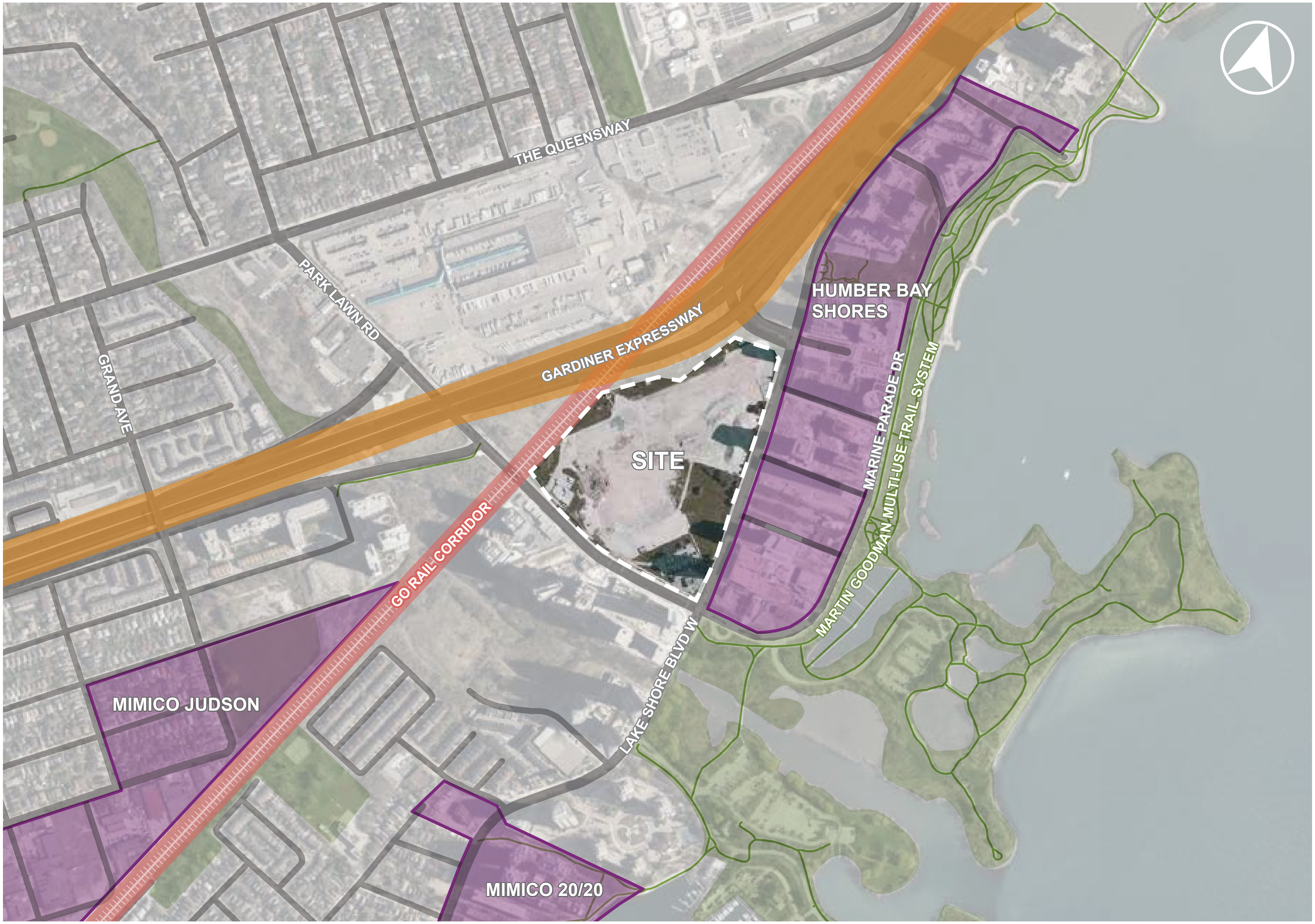


FIGURE 1 SITE CONTEXT

II. THE CHRISTIES SITE

The Christies Site is located in the western area of Toronto at the confluence of a number of regional transportation facilities as they cross the Humber River. These include – significantly – the Gardiner Expressway highway corridor (and its interchanges with Park Lawn Road), two arterial streets in Lake Shore Boulevard West and the Queensway, the Lakeshore West GO rail corridor and the Martin Goodman multi-use trail system.

This confluence provides significant opportunity to support the redevelopment of the 2150 Lake Shore Boulevard West property as a complete community that can – with accompanying investment in new and modified transportation initiatives – be excellently served by a full range of mobility travel options.

Current Area Mobility Challenges

Its adjacency to the Gardiner Expressway and supporting arterial corridors (Lake Shore Boulevard West and Park Lawn Road), and higher-order rail transit infrastructure presents unique challenges for the site, and equally significant opportunity to tap into and improve existing major transportation infrastructure.

Traffic congestion – particularly during the peak periods – is a long-standing issue in the area given the proximity of the Lake Shore Boulevard West corridor to the Gardiner Expressway and the large volume of commuter traffic that “overflows” routinely from the highway onto the parallel Lake Shore Boulevard West corridor. This has led to congestion levels at key points along Park Lawn Road and Lake Shore Boulevard West that are detrimental to the character and functionality of both of these streets as main streets serving the Humber Bay Shores community.

Notwithstanding the presence of the Lakeshore West GO line, there is also a lack of quality transit options serving the area. Existing (and new) area residents are currently relying upon the TTC 501 Queen streetcar service and surface bus routes for any level of transit connectivity which involves – for most trips – extended travel times. Travel undertaken in the Humber Bay Shores and surrounding area is predominately car focused given this factor, which serves to compound the levels of traffic congestion in the area.

The mobility challenges with respect to traffic congestion and the lack of transit access is illustrated in **Figure 2** and **Figure 3**, respectively.

Future Site Mobility Opportunities

Redevelopment of the Site also has the potential to greatly benefit the broader mobility needs of the surrounding, and growing, Humber Bay Shores and South Etobicoke communities, and address long-standing challenges facing existing residents of the area. This is particularly of consequence in the context that the emerging Humber Bay Shores area is planned to become the home – based upon current infrastructure - for over 25,000 people as it builds out over the next few years in addition to a broader area population of 50,000+ people.

The existing area mobility challenges can be addressed through the provision of new and improved transit service options, new street connections, urbanization opportunities of the existing street network and the expansion of the active transportation connections across the community.

Each of these elements can only realistically be delivered as part of, or in conjunction with, a redevelopment of the 2150 Lake Shore Boulevard West property. They are achievable through the coordination of effort by the City, provincial and municipal transportation agencies, First Capital Realty as the developer of the site and area stakeholders to create the best outcome for the Humber Bay Shores, Mimico and Southern Etobicoke areas and, of course, for the development potential of the Site itself.

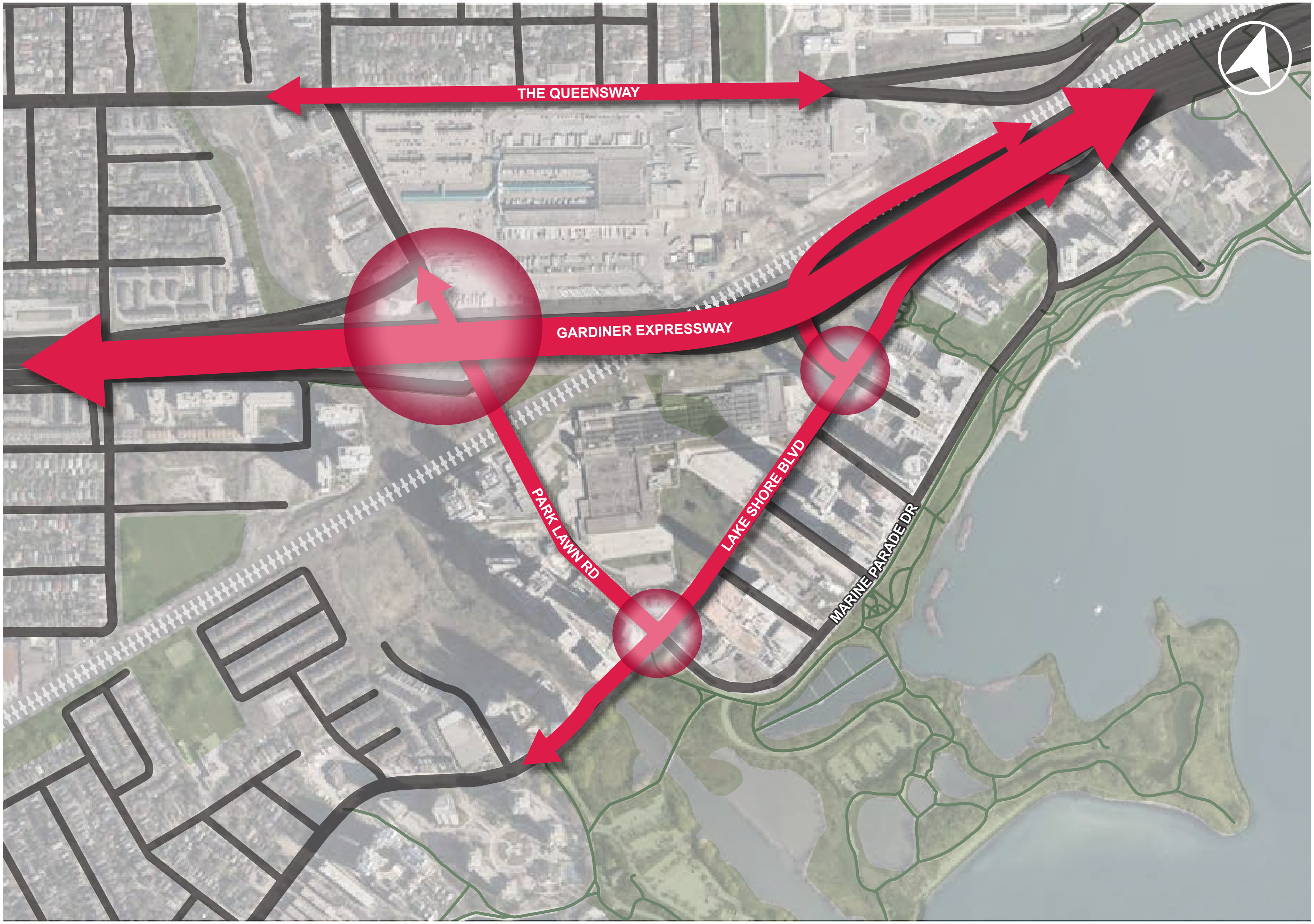


FIGURE 2 TRAFFIC CONGESTION

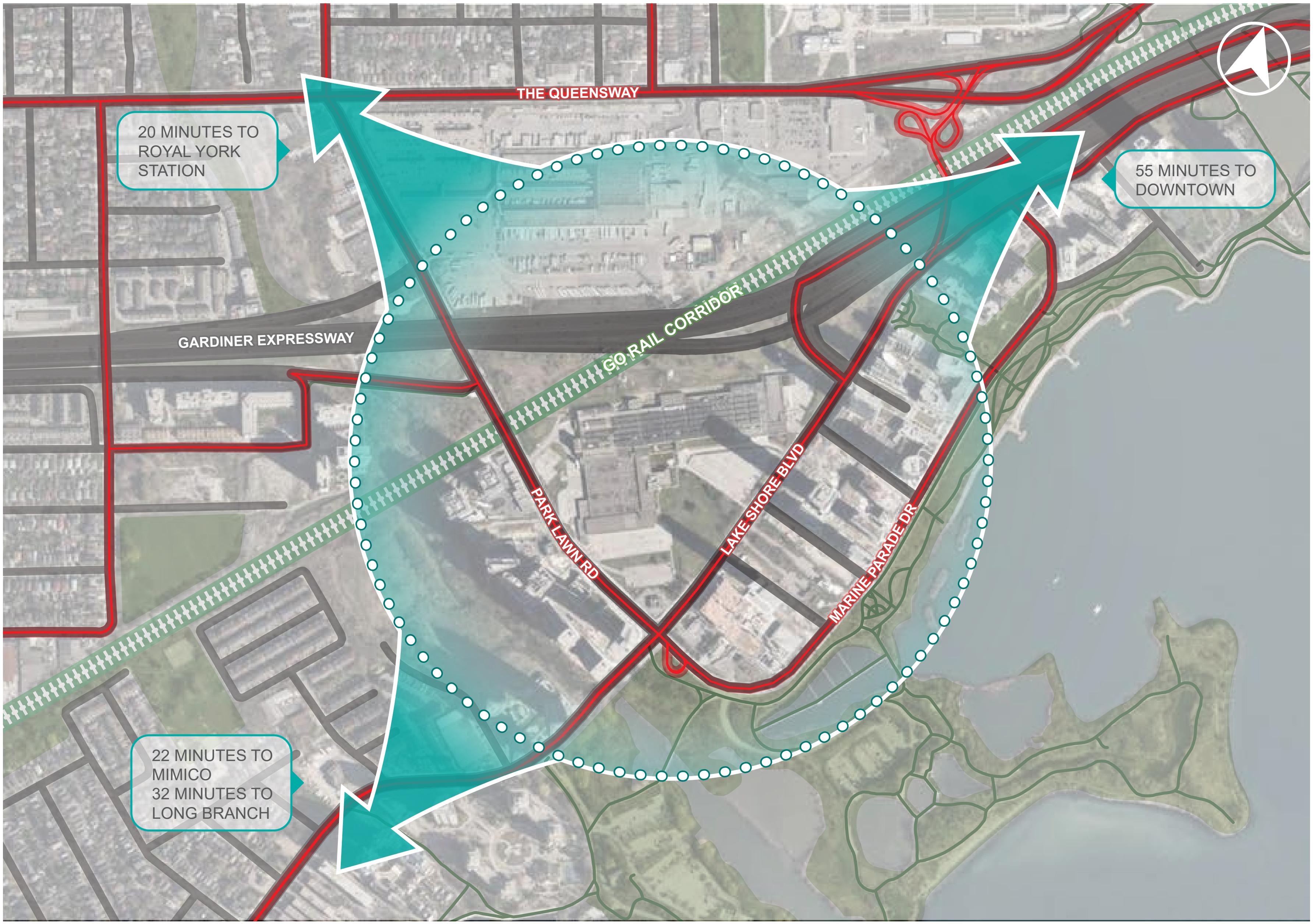


FIGURE 3 THE TRANSIT GAP

III. MASTER PLAN VISION

The proposed Master Plan (herein referred to as "the Christies Master Plan" or "the Master Plan") has been developed with the understanding that transportation advancement is the key to unlocking the potential to develop an integrated, active and attractive community in southwest Toronto. Recognizing that the existing transportation infrastructure defining the Site boundaries, which currently contribute to challenges and barriers to area mobility, presents significant opportunity to bring an unprecedented level of access to transportation networks previously unavailable to the Humber Bay Shores area and southern Etobicoke more generally.

While there are many aspects to the development of a Master Plan for the Site from a transportation and mobility perspective, there are four major themes that are central to the successful development the 2150 Lake Shore property. These will, combined with other planning initiatives, serve to provide a truly workable and effective transportation and mobility context for future residents, employees, patrons and visitors and – importantly – address the needs of existing and new residents in the surrounding, rapidly developing areas in Humber Bay Shore and beyond.

These four "major"" themes are centred around:

1. Advancing and providing "real" transit travel opportunities to the area and the creation of a new integrated GO / TTC transit hub;

2. Addressing and improving current traffic congestion challenges in the area in a way that responds to the current level of tidal commuter motorist use of the area street system as an alternate to the Gardiner Expressway corridor;

3. Implementation of an excellence across a street and public realm network that creates a truly walkable, pedestrian first community that seamlessly integrates adjacent developed / developing areas within Humber Bay Shores and beyond to maximize active-transportation and the potential for walking and cycling as primary modes of travel for short local trip-making; and

4. Creation of a Master Plan and development programme that is focused – as an integral part of every step of its planning – upon a commitment to provide high quality, sustainable mobility options serving both the Master Plan development itself and the growing broader Humber Bay Shores community, that will minimize the reliance upon automobile usage and reduce related traffic impacts of the area.

The comprehensive Master Plan for the 2150 Lake Shore Site provides an overall vision to create a centre for the Humber Bay Shore community that provides for the full range of land uses, facilities, amenities, places, spaces, parks and destinations that sustain successful communities.

From a transportation and mobility perspective, it is recognized that the redevelopment of the 2150 Lake Shore Boulevard West property presents an enormous opportunity to not only address current mobility weaknesses and challenges in the area but to transform mobility in this area of South Etobicoke and the Humber Bay Shores.

The Master Plan has been conceived on this basis, and responds specifically to the existing area transportation challenges to create a mobility context focused upon establishing transit, cycling and pedestrian travel as the primary travel modes for the Site and surrounding area. This will enable the long term area transportation demands of the Master Plan and broader area to be met into the future.

The Master Plan is also focused upon creating an environment that emphasizes the quality of place and the public realm as part of a complete community. This maximizes shorter trip making opportunities through the provision of a wide range of amenities, destinations, facilities serving the site itself and the broader Humber Bay Shores area, and in establishing sustainable travel options as the primary modes for "last mile" trips.

The following are the key underpinning elements of the Master Plan from a mobility and transportation perspective.

The key elements that together implement the first two themes of the Master Plan "**Advancing and Providing Real Transit Travel Opportunities"** and "**Addressing and Improving Current Traffic Congestion Challenges**" include:

- The delivery of the Park Lawn GO train station on the Lakeshore West GO line;
- The realignment of the TTC 501 Queen Streetcar and surface transit services to deliver an integrated and central mobility hub; and
- The delivery of the Relief Road arterial corridor and the relocation of the Gardiner Expressway access ramps.

The above major infrastructure changes unlock the ability to implement the third Master Plan theme of **"Implementation of an Excellence Across a Street and Public Realm Network**" that will reshape the local urban fabric and integrate the surrounding community. This includes:

- The re-characterization of Lake Shore Boulevard West to create an attractive main street across the Humber Bay Shores community;
- The delivery of a unique, fine-grained local street system that integrates the community and creates a block plan supportive of a high quality public and private realm; and
- The connection of excellent recreational and active transportation networks available to the Site and surrounding area.

The identified greater and local area transportation infrastructure deliverables together form the foundation of the Master Plan that enables the delivery of the fourth theme – the "**Creation of a High Quality Master Plan**" that envisions an excellent public realm with an array of uses and unique features that will integrate and form the heart of the southeast Etobicoke community. The Master Plan includes:

- The delivery of approximately 42,500 square metres of commercial space across a range of types, shapes, and sizes including a "market" of street related retail, entertainment and eating establishments, and community-serving shops.
- The delivery of approximately 7,500 new residential units – creating an attractive community at the heart of southeast Etobicoke;
- The delivery of approximately 42,500 square metres of office space creating a true mixed-use community, and employment within the Humber Bay Shores; and
- The delivery of approximately 20,500 square metres of hotel and affiliated commercial space.

The Master Block Plan is illustrated in **Figure 4.**

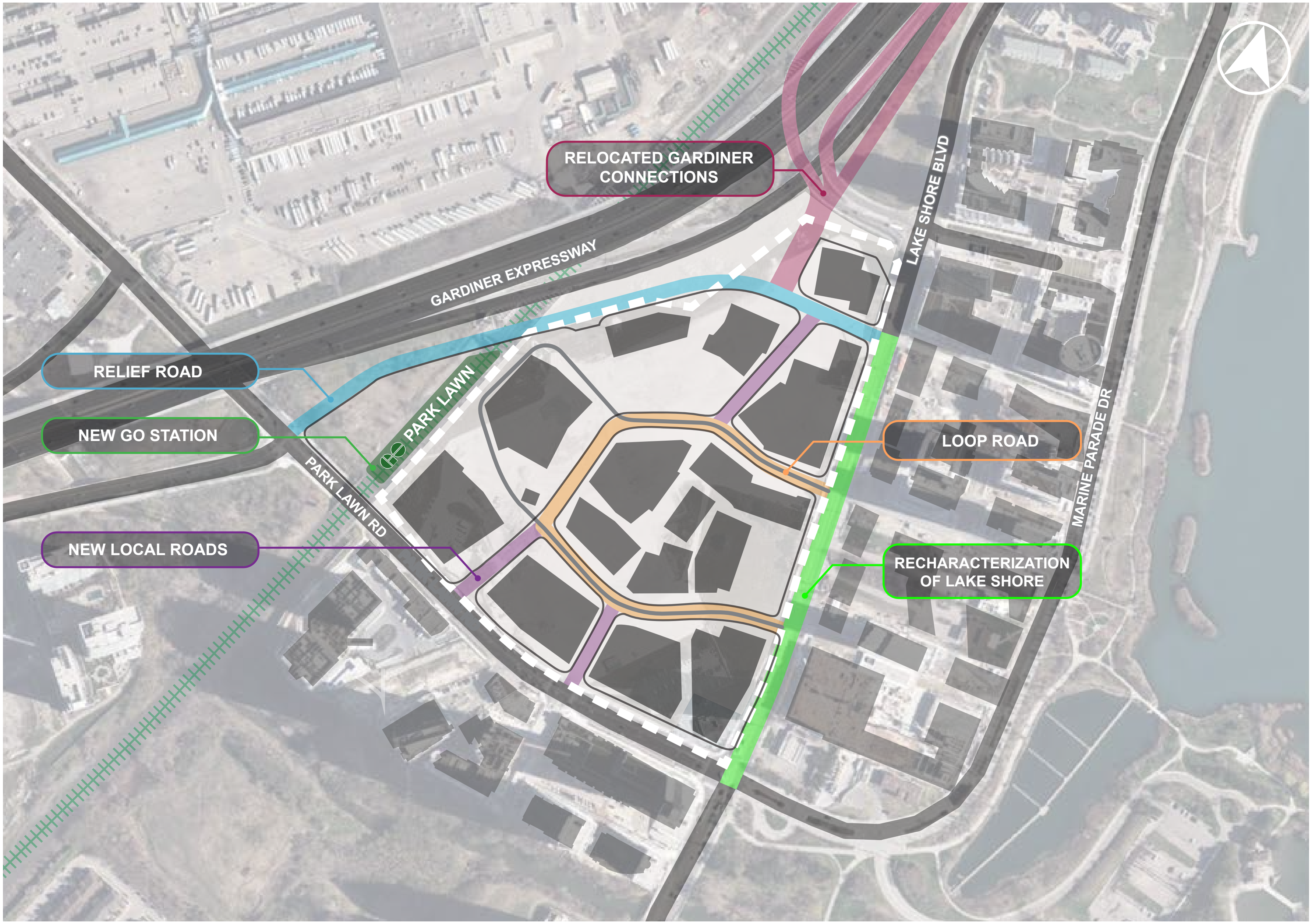


FIGURE 4 MASTER BLOCK AND MOBILITY PLAN

IV. MOBILITY PLANNING PRINCIPLES

To achieve the Master Plan vision and major themes discussed above, a series of mobility planning principles have been established to guide the redevelopment of the Christies Site.

The principles build upon the broader context of Municipal and Provincial planning policy direction that is guiding the way the City of Toronto evolves and responds to changing transportation needs, with initiatives and investments prioritizing the mobility and experience of people over the efficiency of car movement.

The principles understand the existing context and constraints of the Site and recognize the opportunity and role the development plan can, and will play in reshaping the urban fabric and mobility network of the greater community.

The key principles are outlined and discussed in the following sections.

- **Transform Area Transit**
- **Address Area Traffic Congestion**
- **Create Complete Main Streets**
- **Integrate New Neighbourhood Streets**
- **Prioritize Pedestrian Mobility**
- **Enable and Support Cycling**
- **Arrange Site Access and Servicing**
- **Commit to Sustainable Transportation**
- **Meet Future Mobility Demands**

The above principles are integrated through physical infrastructure improvements, site plan elements, site organization and measurable TDM measures, and work together to influence travel demand and characteristics for the Site and surrounding area.

TRANSFORM AREA TRANSIT

Central to any redevelopment of the 2150 Lake Shore Site is the advancement of transit service in the area and – significantly – the introduction of a new Park Lawn GO Station on the Lakeshore West rail corridor and a new integrated TTC station at the new GO station.

Integrated GO / TTC Transit Hub

From a transit perspective, the redevelopment of the Site can realize "a once in a generation" and unique opportunity to provide a new integrated Transit Hub and District, such as the new Park Lawn GO Station.

First Capital Realty has been working with Metrolinx to advance and realize the introduction of a new Park Lawn GO Station as a central element of the Master Plan. This work has been extensive and has involved an update to the Initial Business Case (IBC) for the station and advancement of the next stages of design / approval necessary to bring the station to realization. In fact, work has begun on initiating the required transit Environmental Assessment (EA) process to enable the next stages of approval and implementation of the station by approximately 2025.

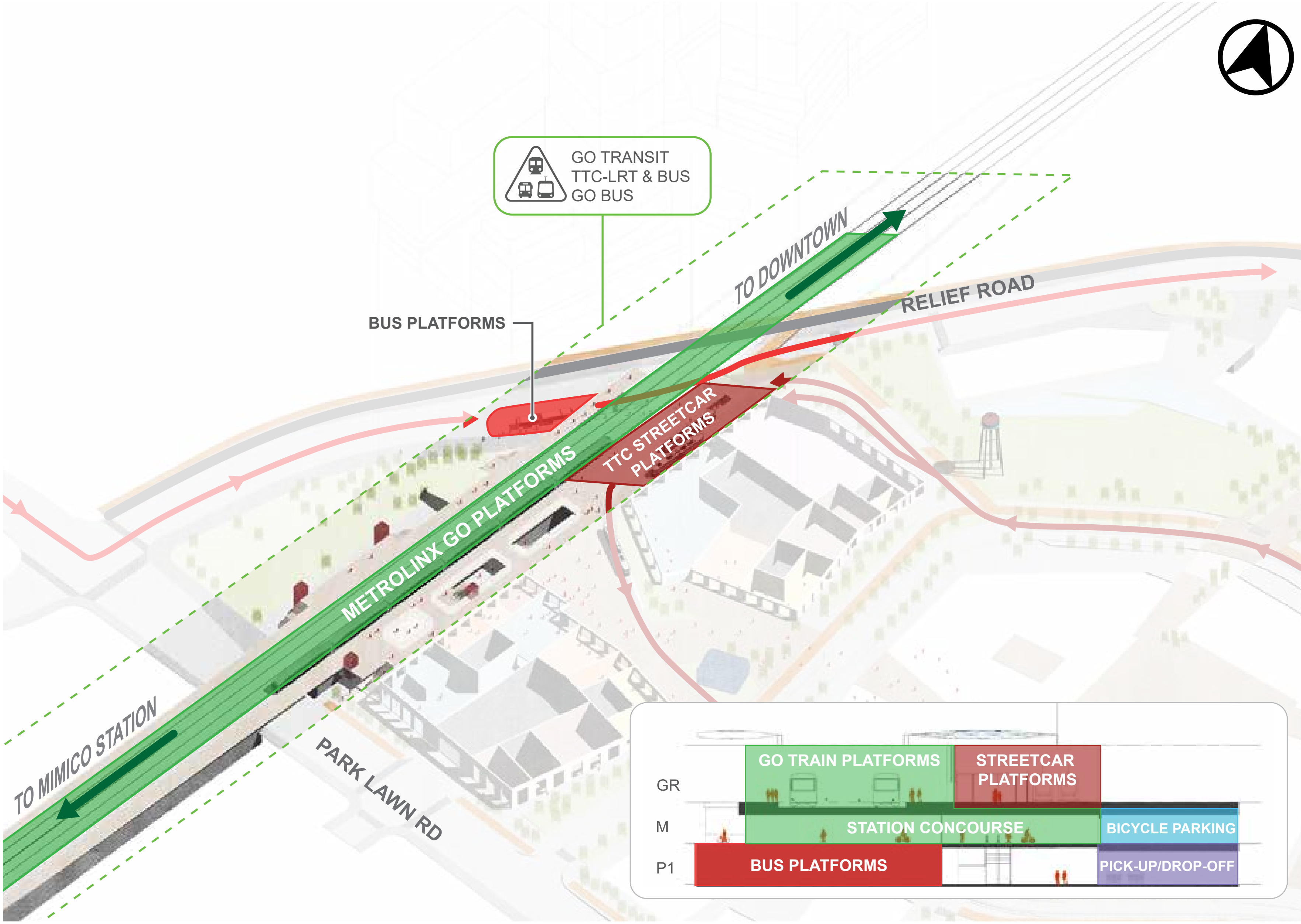


FIGURE 5 INTEGRATED TRANSIT HUB

Enhanced Transit Network

An integrated TTC streetcar / Light Rail Transit (LRT) and bus terminal facility is seen as an instrumental element of the transit hub and the delivery of excellent transit to the area in the future. The integrated facility will provide for convenient and efficient passenger transfers and inter-change between existing and new LRT and bus services that will link this new transit hub facility to the surrounding communities.

This Hub will provide for long awaited and transformational transit service options to / from central Toronto and across the Greater Toronto Area for this part of Southern Etobicoke. With the Transit Hub. This level of service will be accessible from the heart of the Humber Bay Shores community.

GO Rail Transit

A two-way 30 minute, all-day service is being contemplated along the GO rail line at the Park Lawn GO Station. Such a frequency will greatly improve commuter rail travel options provided eastbound and westbound along the Lakeshore GO corridor, and will reduce travel times to downtown Toronto (and to any of the existing and planned downtown RER stations) to 15 minutes or less, which is a highly competitive and attractive travel time in the Toronto context.

This level of accessibility will provide a level of transit service that has not be afforded to this area in the past and will attract the vast majority of travel needs of the future 2150 Lake Shore Boulevard West development and the Humber Bay Shores area.

TTC & Other Surface Transit

The creation of the integrated transit hub provides a logical terminus and point of convergence for modified existing routes and new area surface transit routes in order to serve as integrated feeder and distribution services to the “fast” GO rail service provided at the Park Lawn GO station.

The linkage of area surface transit services to the Park Lawn GO Station will offer significant benefit to a substantial number of residents (likely over 60,000 future residents)– beyond Humber Bay Shores – across southern Etobicoke that fall within a convenient transit trip water-shed (or transit-shed) of the GO station. This has substantial potential to reduce auto-mode reliance across a wide area of southern Etobicoke and the existing level of car usage in these areas.

- **LRT Services**

The TTC 501 Queen streetcar service (future Waterfront West LRT) will be improved and routed to / from the transit hub facility through the 2150 Lake Shore Boulevard West site to provide the desired connectivity between this service and the tributary areas it services. The LRT routing would be enhanced – as per current City plans – as a dedicated LRT right-of-way through the Humber Bay Shores area to maximize efficiency and service potential.

- **TTC Bus Services**

There is substantial opportunity to modify existing and add new surface bus routes in the area to respond and capitalize upon the transit accessibility afforded by the new Park Lawn GO station in order to serve large areas of southern Etobicoke. The existing Prince Edward (route 66), Queensway (route 80) and Swansea (route 77) bus services are all candidates for extension and modification to service the GO station. Other new local Humber Bay Shores and Mimico services may also be introduced in response to the transit opportunities in the area. These improved services would provide for a considerable level of transit connectivity within the GO station tributary area and would fully leverage and capitalize upon the capacity and convenience of the new GO train services that would be available within this area.

- **GO Bus Services**

There is also opportunity to introduce GO bus services at the Transit Hub to provide a range of more regional services to – for instance - Pearson International Airport and other key destinations.

Transforming Area Mobility Patterns

The concept of the Transit Hub is aligned with, and supports, planning initiatives recently undertaken by the City of Toronto as part of the City's Waterfront Transit Reset study and by Metrolinx as part of its review of potential new station across the GTA. This includes the advancement of Environmental Assessment processes that enable the introduction of such large infrastructure projects.

The potential to anchor and integrate such a Transit Hub (which would be of great benefit to the Humber Bay Shores area today) with a new mixed-use and complete community that is built upon a sustainable transportation philosophy, capitalizes and supports the significant capital investments being made by the Federal, Provincial and Municipal Governments in new transit infrastructure across the Region and that is planned by the City of Toronto.

The integration of new development and new and improved transit aligns directly with Provincial and Municipal policies and will – in this instance – be of considerable benefit to a large number of existing or prospective area residents within the rapidly emerging Humber Bay Shores area.

The ability to enable the realization of an integrated TTC / GO Transit Hub as part of the 2150 Lake Shore Boulevard West property cannot be under-estimated in the context of addressing the transportation and mobility challenges facing this part of the City and creating new, sustainable mobility options for a substantial number of people.

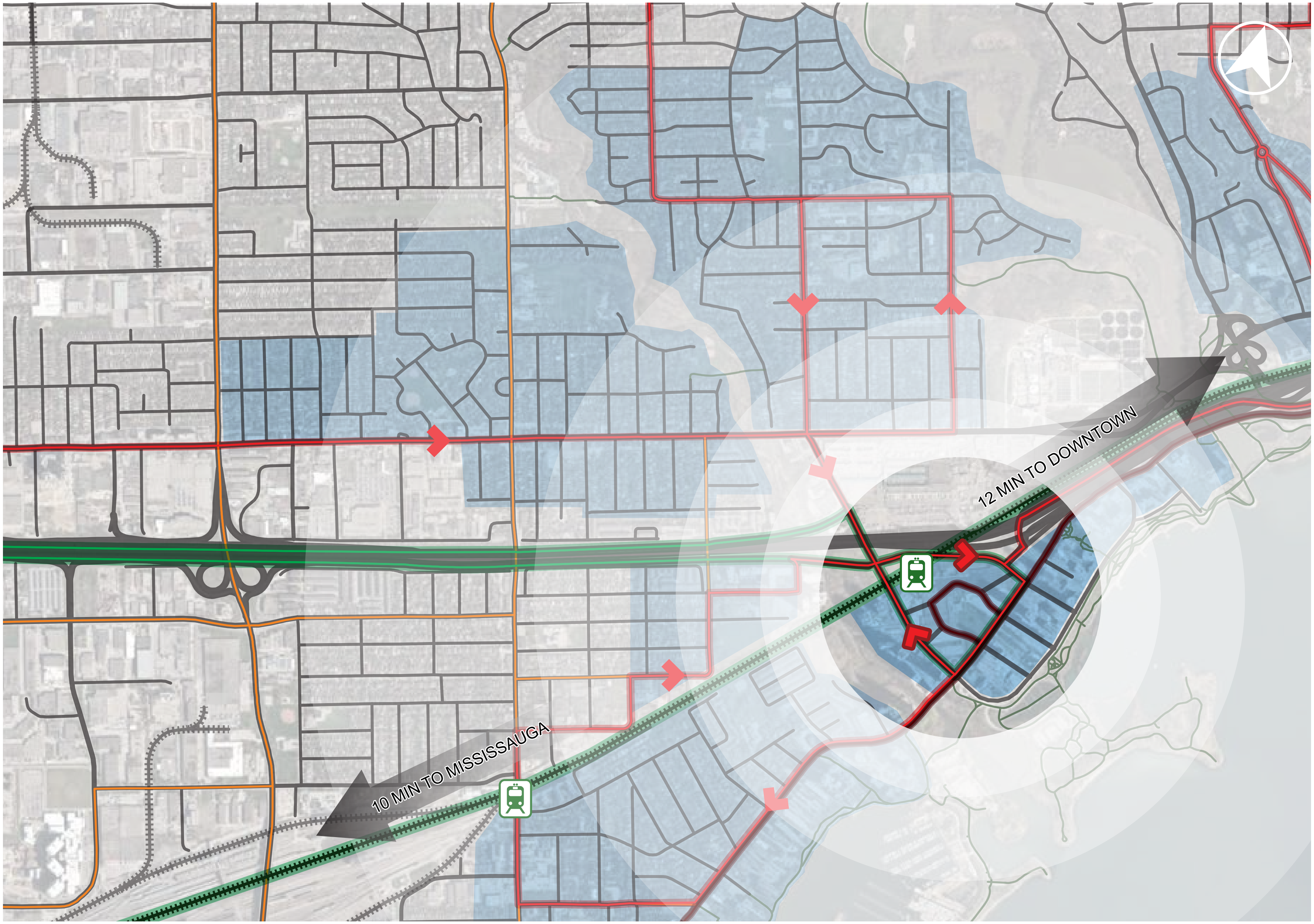


FIGURE 6 TRANSIT SHED AND BENEFITS

ADDRESS AREA TRAFFIC CONGESTION

A Responsive New Street Network

The Master Plan provides for a responsive street network with critical new major street linkages and improvements that will addresses current challenges, and will optimally provide for and manage new vehicular activity needs.

This network is centred around provision of a new bypass facility (referred to as the ”Relief Road”) running along the northern site boundary that – significantly – provides a new crossing of the rail corridor and substantially benefits the area network as a whole. The benefits also extend to improvements on the area's arterial street system and creation of a network of smaller, pedestrian focussed streets within the 2150 Lake Shore Boulevard West Site itself.

The Relief Road

The potential to provide the Relief Road link between Park Lawn Road and the Gardiner Expressway / Lake Shore Boulevard West corridors over the rail corridor is seen as a significant element of any traffic related solution for the area.

The Relief Road would “offload” – acting as a bypass facility - through traffic from Park Lawn Road and Lake Shore Boulevard West enabling the adjacent arterial roads it to be re-established and re-imagined as true “Main Streets” within Humber Bay Shores. This would address longstanding capacity constraints on Lake Shore Boulevard West at Park Lawn Road and Palace Pier Court. It would also, and significantly from a development perspective, provide for excellent direct highway / arterial vehicular access for the new Site development, enable mobility to direct traffic and servicing activity to the northern periphery of the Site.

While the Relief Road is a complex and significant piece of new infrastructure that involves: the construction of a new rail underpass adjacent to the new Park Lawn GO station, modification to City owned lands north of the rail corridor opposite the current Gardiner Expressway off-ramp on Park Lawn Road, and modifications to the Gardiner Expressway / Lake Shore Boulevard West ramps at the east end of the site. The value it provides in addressing area congestion matters and optimizing traffic patterns in the Humber Bay Shores area is substantial.

Other Arterial Street Improvements

Other improvements to the area arterial street system are identified for Lake Shore Boulevard West, Park Lawn Road and the Queensway in the Master Plan in order to accommodate future traffic demands across the Humber Bay Shores area (including new Site and other development activity), and to – importantly – integrate the planned Waterfront West LRT dedicated right-of-way on Lake Shore Boulevard West.

These streets will also be re-imagined – while considering traffic related needs - to integrate new cycling and pedestrian facilities and features as well as substantial enhancements to the streetscape and public realm.

The ongoing City of Toronto Park Lawn-Lake Shore Transportation Master Plan and Environmental Assessment process will determine the ultimate set of improvements and changes to the broader area road network supporting Humber Bay Shores and the South Etobicoke area. It will also provide an implementation mechanism that will enable important and necessary City-scale infrastructure moves to be made in step with any redevelopment of the 2150 Lake Shore Boulevard West property.

FIGURE 7 MAJOR NETWORK MOVES

CREATE COMPLETE MAIN STREETS

Lake Shore & Park Lawn Today

The redevelopment of the 2150 Lake Shore Boulevard West property and the new street network opportunities that are presented as a result, will enable a re-creation of Lakes Shore Boulevard West and Park Lawn Road in the Humber Bay Shores area.

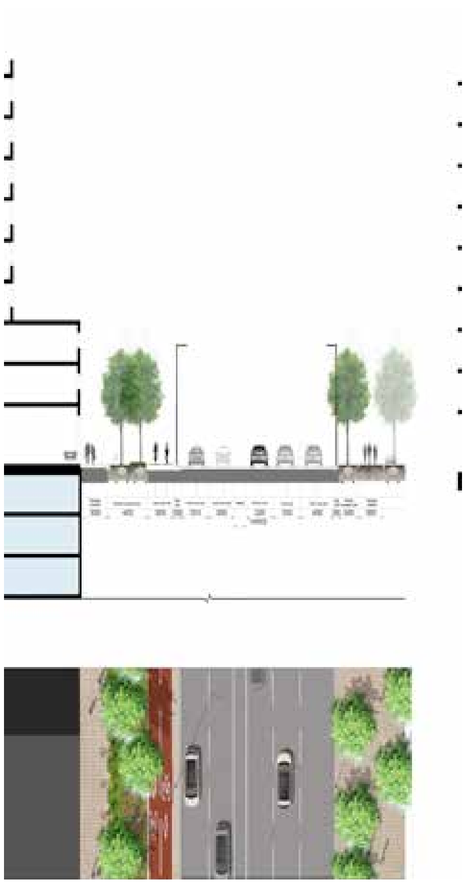
Both of these streets have long operated primarily as vehicular thoroughfares as a natural consequence of the connectivity afforded to the Gardiner Expressway and the presence of the former Christies Cookie factory on the 2150 Lake Shore Boulevard West property.

There was – up until relatively recently – little need for these streets to operate in any other fashion given the previous lack of residential development and the heavy presence of industrial uses.

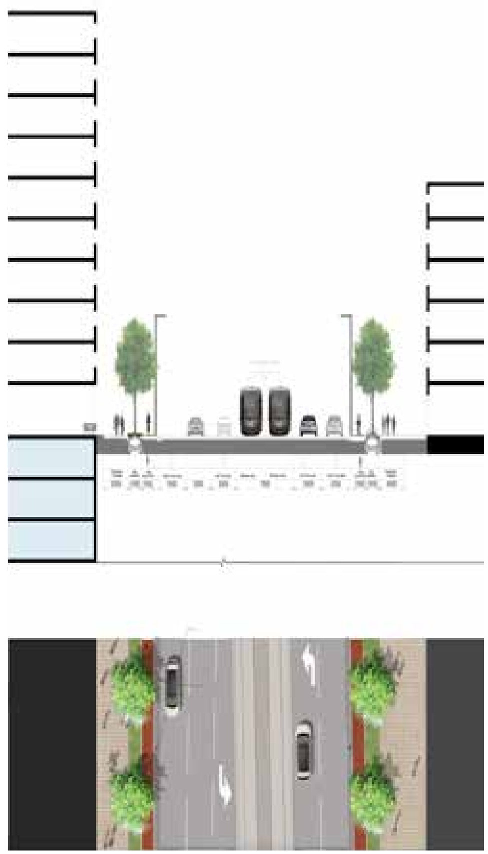
Complete Main Streets

One of the Master Plan objectives is to enable the re-creation of both Park Lawn Road and Lake Shore Boulevard West in the Humber Bay Shores area as true complete "main streets," serving the local communities on both sides of the corridors and accommodating all travel modes with a particular emphasis on pedestrian realm. The introduction of the Relief Road is central to off-loading current (and future) traffic activity from these streets and allowing them to operate as more locally focused corridors from a traffic function perspective.

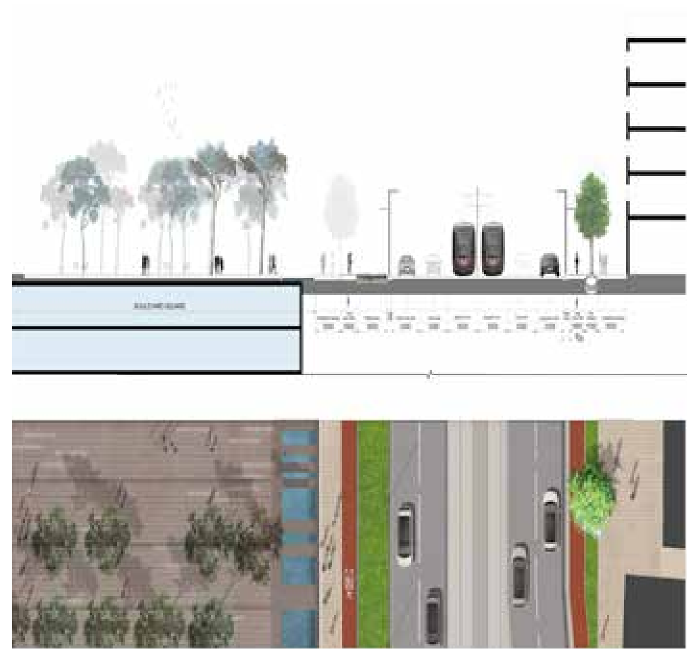
The Master Plan proposes significant reconstruction along both of these corridors to incorporate the long planned dedicated LRT right-of-way on Lake Shore Boulevard West, bicycle facilities on both streets and significant enhancements and improvements to the pedestrian and public realm. An emphasis has also been placed on creating a fine grain network of formal signalized crossing opportunities as part of the overall focus to link the Humber Bay Shores community together at a pedestrian scale.



Park Lawn Road



Lake Shore Boulevard



Lake Shore Boulevard

FIGURE 8 PARK LAWN & LAKE SHORE MAIN STREETS & CROSS SECTIONS

INTEGRATE NEW NEIGHBOURHOOD STREETS

New Local Street Network

A fine-grained series of new public and private streets will be established within the 2150 Lake Shore Boulevard West property. This network will provide for public access to / from and through the new community, will enhance the public realm and pedestrian and non-automobile travel environment, and will also, necessarily, support the vehicular access and service needs of the emerging neighbourhood.

This street network will provide for building address, retailing opportunities, public realm spaces and places, landscape features and will form the connective tissue of the development plan for the Site.

Complete Streets & The Public Realm

The proposed new street network will integrate facilities supporting all travel modes including formal transit service (LRT and streetcar), cycling facilities (on / off-street bike lanes, trails) and pedestrian boulevards that link and connect to the surrounding neighbourhood fabric.

They will be true complete streets focusing upon an excellence in the design and composition of the street network to create a vibrant and successful community.

Public & Private Streets

A network of public local streets are proposed “looping” through the Master Plan and providing connections to both Lake Shore Boulevard West and Park Lawn Road. These form the “spine” connectors within the Master Plan and will accommodate the LRT routing to / from the Transit Hub.

The street network is intended to be primarily public and dedicated to the City, while two portions are proposed to remain private due to the integration of below grade servicing and parking facilities beneath them. The private linkages will – notwithstanding ownership – be designed to look and feel like public streets.

It is noteworthy that lateral tunnel connections are required at key locations beneath portions of the public street network to provide for the integrated servicing / parking basement facility.

Connectivity

The proposed street network is focused on creating a significant level of multi-modal connectivity and interconnection with the bordering main streets and neighbouring communities within Humber Bay Shores.

Importantly, a series of signalized intersections are proposed at each of the main street connections to maximize neighbourhood pedestrian routing opportunities and provide formal, safe pedestrian crossing facilities as part of the emphasis on creating a complete community.

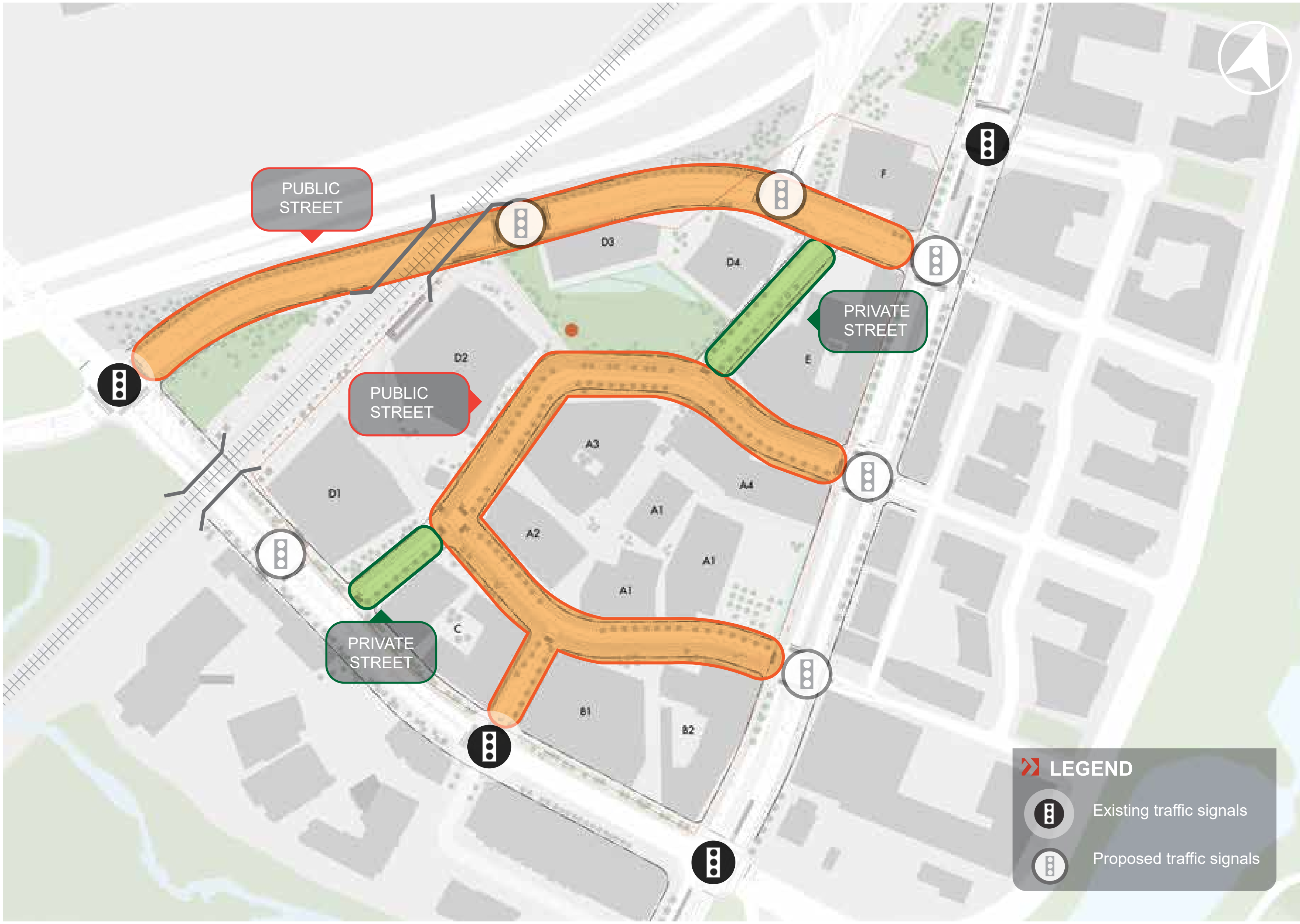


FIGURE 9 NEIGHBOURHOOD STREET CONNECTIONS

PRIORITIZE PEDESTRIAN MOBILITY

A Mixed-Use Community

The Master Plan creates a true mixed-use community on the 2150 Lake Shore Boulevard West property that provides for a wide range of complementary land-uses that extend across retail, employment, service, recreational, entertainment, residential and institutional uses.

The introduction of such a broad and strong offering of uses distributed across the Site provides a highly active and vibrant core to the Master Plan community, which will serve not only the Site itself, but the broader needs of the Humber Bay Shores community.

Significantly, the core elements of the plan, and wide range of amenities and services provided, can all be reached on foot from across Humber Bay Shores without the use of a car for the vast number of trips.

The Pedestrian Realm

The quality of the public realm created and the successful integration of the broad array of great, practical, convenient, interesting, safe and attractive pedestrian-scale connections (including formal signalized street crossing facilities) that link across the Master Plan and beyond into Humber Bay Shores community, are significant factors in creating an environment that is highly supportive of pedestrian mobility.

Walking as Primary Travel Mode for Short Trips

The combined strengths, from a transportation perspective, of establishing a strong mixed-use plan supported by a well integrated and highly walkable pedestrian network on the 2150 Lake Shore Boulevard West property enable walking to be established as the primary travel mode for a significant proportion of trips made within the Master Plan and surrounding Humber Bay Shores area.

Key in this regard are the relationships created between the complimentary uses within a mixed-use environment that enable a significant proportion of trip-making needs (i.e. retail, services, amenities and recreation) of the Site and broader community to be met within the local area itself.

The ability for area residents to travel – primarily on-foot – to a wide variety of local destinations that meet the needs of a community (i.e. employment, recreational, institutional, retail and service) is a significant factor in shortening trips made to / from the area, internalizing trip-making to a significantly greater degree than occurs today in the Humber Bay Shores. This eliminates the need for a substantial component of car-borne trip-making that would occur without such relationships.

Transit and “Last Mile”

The proposed Transit Hub is located within the heart of, not only the Master Plan, but the Humber Bay Shores community as a whole.

Notably, all of the Master Plan area falls within a 5 minute walk of the Transit Hub while the vast majority of the broader Humber Bay Shores area is located within a walk of 10 minutes or less. The so-called “last mile” of any transit based journey can – as such - be readily made on-foot within an attractive environment.

This further augments the convenience and attractiveness of transit as a travel mode for the Master Plan and broader Humber Bay Shores community.

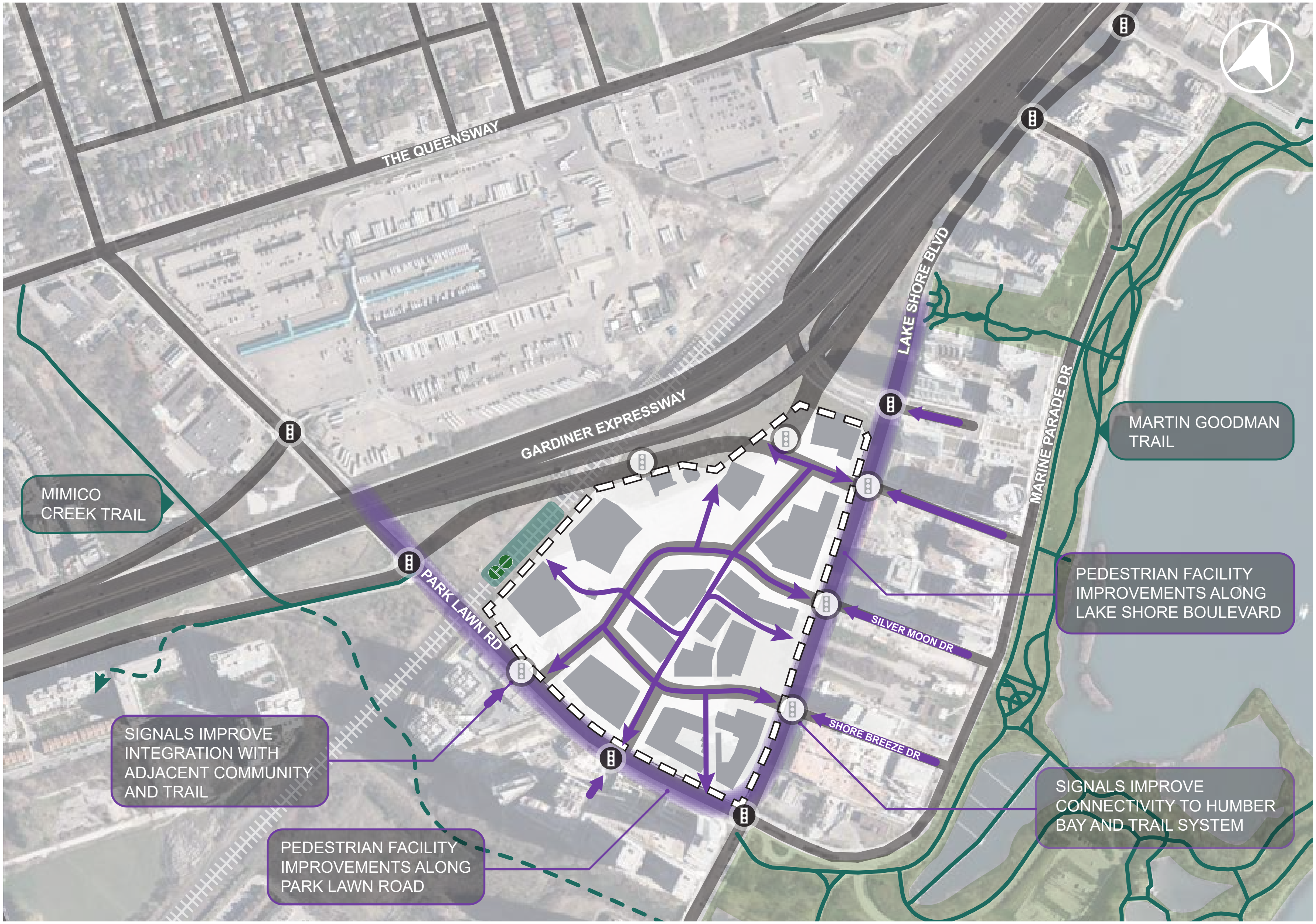


FIGURE 10 PEDESTRIAN MOBILITY

ENABLE AND SUPPORT CYCLING

Cycling as a Strong Travel Mode

The redevelopment of the 2150 Lake Shore Boulevard West property provides a substantial opportunity to augment, extend and complete the existing area bicycle trail / path network.

The Master Plan has been developed to create a local environment that will establish cycling as a strong and viable travel option for a wide range of travel needs across Humber Bay Shores and the surrounding area. This – notably – includes trips made to / from the planned Transit Hub (i.e. "Last Mile") and the commercial centre of the Master Plan.

At the same time, the Master Plan and the connectivity afforded to the broader area cycling network, offers substantial support for longer distance recreational and commuter travel, particularly across the Lake Ontario waterfront towards downtown Toronto.

An Expanded Cycling Network

The Master Plan provides for a network of protected bicycle facilities within the Site itself and on the adjacent arterial street system.

This network will connect with, extend and complete the broader trail / path network in the area and offer connectivity to the Martin Goodman Trail on the Lake Ontario waterfront, to new / planned linkages along Mimico Creek, and to the trail network that extends up Humber River.

Key Network Elements

New bicycle connections are planned throughout the Master Plan and surrounding network, which will provide linkages between all of the key facilities, destinations and recreational spaces within the Master Plan area.

The key network elements include:

- An off-street bicycle track along the north side of the Relief Road linking from the Mimico Creek trail network, beneath the rail corridor, to Lake Shore Boulevard West and the Martin Goodman Trail;

- Protected one-way cycle tracks on Lake Shore Boulevard West and Park Lawn Road;

- Two-way cycle tracks on the proposed Master Plan "Loop Road" and Park Lawn Road; and

- Direct cycle connections to the major bicycle parking facilities to be provided at the Transit Hub from the Relief Road cycle track and from the Loop Road facilities.

End User Facilities

A range of long and short term bicycle parking facilities and supporting facilities (i.e. showers, repair stations) will be provided across the Master Plan to provide for the needs of all user groups including residents, employees, visitors and commercial patrons. Access convenience and quality will be a significant focus of the detailing of the Master Plan.

A major contemporary bicycle parking facility will be integrated into the Transit Hub as part of the overall strategy to establish cycling as a strong commuting "Last Mile" travel option.

Bike Share & Sharing Services

Bicycle Sharing and other related mobility services (i.e. scooters) will all form part of the overall Master Plan cycling strategy to maximize cycle-use opportunities.

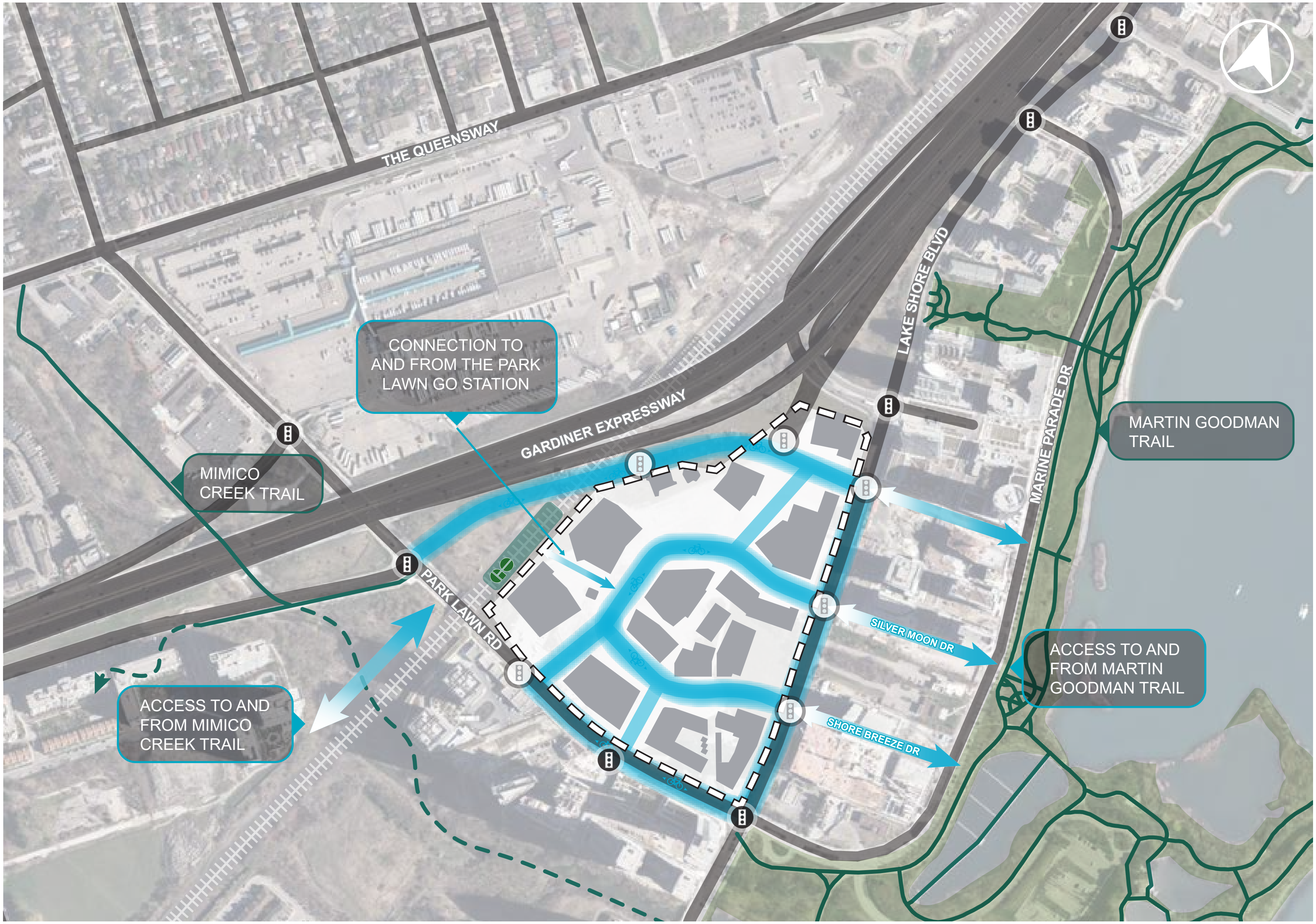


FIGURE 11 CYCLING CONNECTIONS

ARRANGE ACCESS AND SERVICING

A Comprehensive Strategy & Public Realm Considerations

The Master Plan has been developed to take advantage of the potential – with a single ownership - to consolidate vehicular systems and access across multiple blocks and buildings to minimize the intrusion of servicing, loading and higher traffic activity at grade within the heart of the Master Plan. More specifically, the ability to consolidate vehicular access, servicing and parking facilities removes the need to provide multiple separate facilities for each building or development block, which affords substantial benefit to the overall Master Plan.

This comprehensive approach to planning and integrating such vehicular systems into the fabric of the Master Plan is, in fact, central to the creation of a high-quality public realm across the site.

A Responsive Vehicular Access System

The primary vehicular parking and loading access facilities have been consolidated to five locations distributed across the Master Plan.

The Master Plan strategically places these primary accesses on perimeter of the Master Plan to most directly “capture” arriving and departing traffic, to maximize use of the Relief Road as a direct entrance to the below grade levels and – importantly - avoid large concentrations of traffic within the heart of the Master Plan.

Access to the servicing network is provided via the Relief Road taking advantage of the beneficial grade differences provided along that routing. Vehicular access to parking is provided from each of the five access locations.

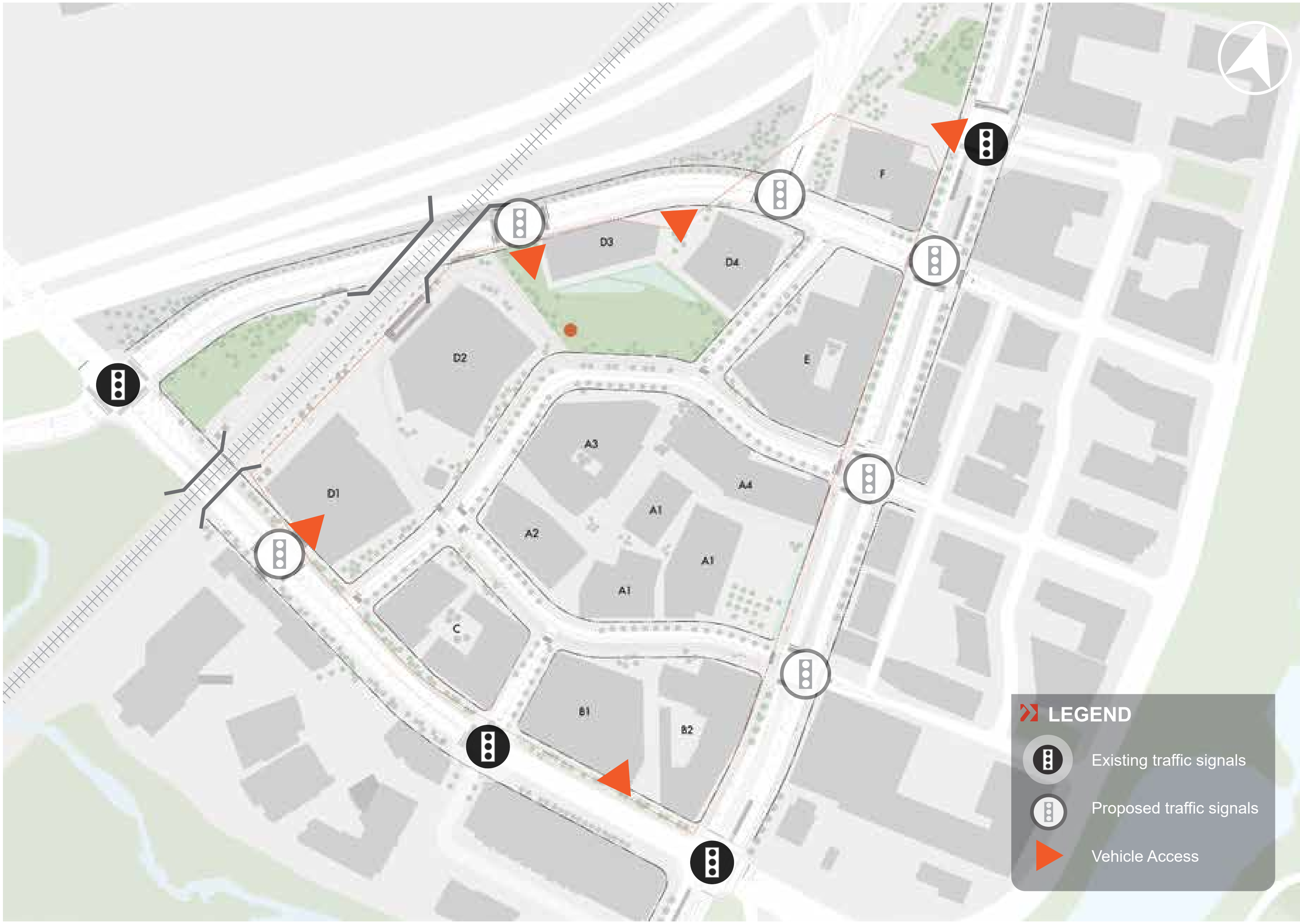


FIGURE 12 ACCESS ARRANGEMENTS AND PUBLIC REALM

An Integrated Consolidated Below Grade Servicing Plan

The Master Plan integrates all loading and parking facilities below grade within a consolidated basement.

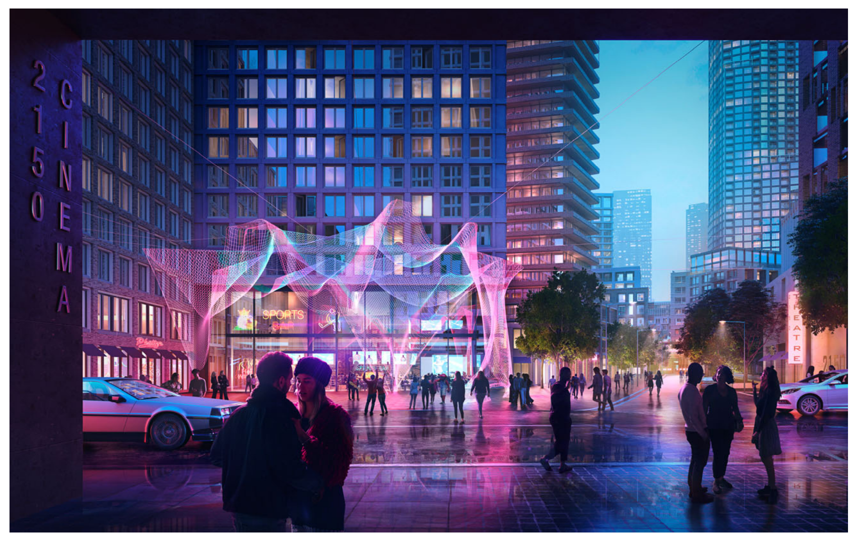
Servicing and loading for each development parcel and building is provided for via a system of distributed below grade loading / service areas and connecting linkages. The distribution of loading facilities provides an effective and efficient series of facilities that will meet the loading and delivery needs of each land use of the Master Plan.

Parking is provided on a consolidated basis beneath each development parcel and will support the buildings above. Commercial parking supporting the employment, retail and visitor parking needs will be located on the upper portions of the garages, while residential parking will be provided on the lower levels. Parking supply needs will be determined through the approvals process, but are intended to be minimized as part of the overall sustainability strategy through the adoption of reduced base parking standards and a sharing of parking between uses.

Vehicular pick-up / drop-off facilities for the main Transit Hub and commercial uses are also provided below grade to accommodate the most intense "front door" needs off of the area street system within appropriately designed facilities.

Connections Below Public Streets

The below grade parking and servicing facilities are located beneath the Master Plan development parcels and outside of the proposed public road network and park to be dedicated to the City. However, to achieve the level of consolidation sought, it is necessary to provide a number of below tunnel connections at strategic locations beneath the proposed public streets.



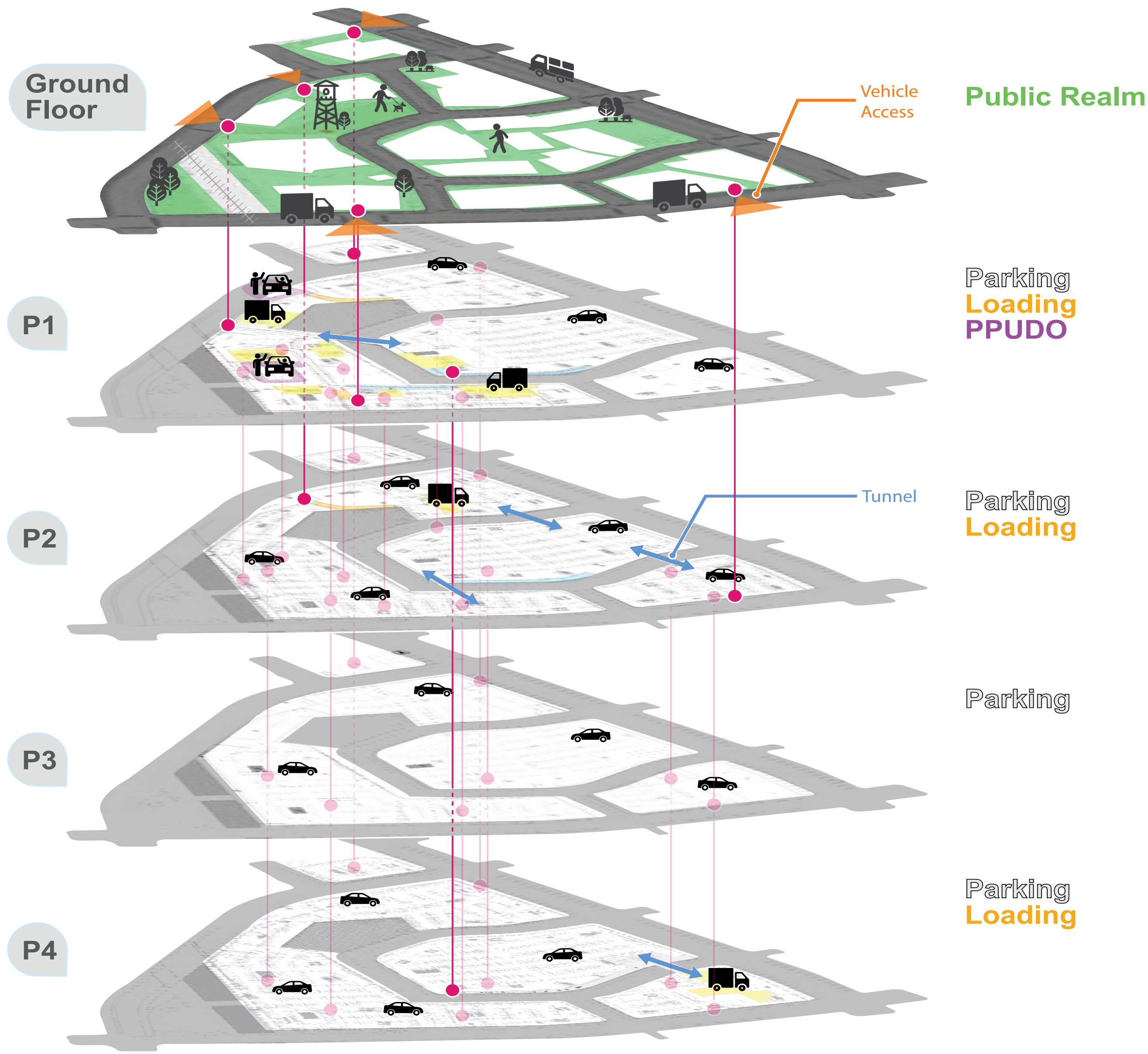


FIGURE 13 CONSOLIDATED AND CONNECTED BELOW GRADE SERVICING

COMMIT TO SUSTAINABLE TRANSPORTATION

The Changing Mobility Context

Travel and mobility across the City is changing with an increasing reliance now being placed upon transit and other sustainable forms of transportation.

This shift in behaviour across the City is being supported by considerable investments being made by all three levels of government in transit and other mobility infrastructure initiatives.

Importantly for the Humber Bay Shores and South Etobicoke area, these investments include for substantial increases in service along the Lake Shore West GO rail corridor that will provide fast and frequent service to downtown Toronto and elsewhere.

Significantly, these service improvements, combined with other local transit improvement initiatives such as the Lake Shore LRT service, will provide unprecedented levels of new transit capacity and accessibility for South Etobicoke across the Greater Toronto Area.

This increase in transit accessibility, combined with the Park Lawn integrated Transit Hub and new commercial centre within the 2150 Lake Shore Boulevard West property, has the potential to offer significantly enhanced mobility options for both established and new emerging communities across South Etobicoke.

Influence of the GO Station & Mode Share

The ability to locate a new GO station at Park Lawn as part of an integrated transit hub within the 2150 Lake Shore Boulevard West Master Plan is “game changing” for – not only the 2150 Lake Shore Boulevard West site itself, but also for the surrounding area.

The new GO station, and network of enhanced LRT and bus services that would converge up the new transit hub, will offer significantly enhanced and viable travel options for many thousands of people who would be within a short walk or a short bus / LRT ride of the new Park Lawn station.

Residents within the tributary “transit-shed” of the new Park Lawn GO Transit Hub would be able to capitalize upon the vastly reduced travel times afforded across the Greater Toronto Area including to / from downtown Toronto (12 minutes), Liberty Village (8 minutes), East Harbour (16 minutes) and beyond.

While the reduction in transit travel times will capture / re-direct existing (TTC) transit riders in the area, a significant proportion of existing area car-borne travel has the potential to shift to utilize these enhanced transit services. This will serve to reduce current car reliance and usage levels and suppress area traffic activity level growth.

Facilitating Multi-Modal Travel

The Master Plan is conceived based upon facilitating non-automobile based travel, reducing the overall travel demands of the development, assisting in reducing demands of the neighbouring existing and developing areas and take advantage of off-peak travel capacity on area transportation systems.

The mixed-use foundation of the plan and the provision of significant non-residential uses provides a number of inter-connected benefits.

These include:

1. the beneficial relationships a mix of uses creates between the component land-uses;

2. the way such a grouping of uses creates destination trips to the Site that are counter-flow to traditional "peak-direction" residential trip-making patterns; and

3. the opportunities for people to travel, to a significant extent, within their local community for a wide variety of purposes without the use of car.

Significantly, employment and retail / entertainment / recreational uses are generators of activity either outside of the traditional commuter peak periods and / or - primarily in the off-peak travel direction. This off-peak travel will, desirably, be able to make use of available transportation capacity on the area transit and street system.

All of the above will assist in minimizing off-site travel demands of the Master Plan and – in fact – the surrounding area, promote non-automobile focussed travel and mitigate impacts of increasing future travel needs of the area.

A Commitment to Demand Management

Sustainable transportation strategies are integrated into all aspects of the Master Plan development and supporting infrastructure planning, and will continue to develop as the Master Plan evolves to include the future operation and management of its buildings, land uses and supporting facilities.

A complementary Demand Management Plan has been developed that will evolve further as the Master Plan is advanced. This Plan aims to provide a framework for three frames of reference:

- broad infrastructure decision making;
- site systems and facility design / operation; and
- user behaviour.

This Demand Management Plan has influenced all aspects of the Master Plan and provides parameters to be advanced moving forward including:

1. the physical plan including its design, organization, mobility systems, infrastructure provisions and building facilities;

2. operational measures that will be deployed on-site such as eco-mobility focussed services (i.e. car-share, bike-share, vehicle rentals, scooter rental, app development, centralized delivery logistics) and the way they are deployed through the creation of clusters where all such uses / facilities would be provided; and

3. ongoing and active promotional and management strategies designed to effectively maintain, evolve and optimize the Site Transportation Demand Management systems.

MEET FUTURE MOBILITY DEMANDS

Master Plan Travel Demand Forecasts

Future travel demands projected for the Master Plan have been assessed on a first principles person trip making basis.

Peak hour travel demand forecasts are derived using person trip making parameters for each of the component land uses within the Master Plan taking into account, trip intensity, trip purpose, land-use interaction and multi-purpose trip making as well as internalization and local trip capture potential.

The distribution of person trip making across the Greater Toronto Area was derived for each land-use (residential, commercial and employment) from a review of Transportation for Tomorrow (TTS) survey information and retail trade area considerations. This distribution was used to inform likely travel mode choice for residents, employees, visitors and retail / entertainment patrons based upon the relative availability, travel time and convenience of transit and other travel options for each specific origin – destination set.

Other Area Development Forecasts

The travel demands of future and emerging area development in the South Etobicoke area have been assessed on a comprehensive basis adopting the same person trip-making based approach as that taken for the 2150 Lake Shore Boulevard West property.

Future trip-making to / from emerging area development within the area influenced by the planned Park Lawn GO Station "transit shed" area have been assessed reflecting the changing (and vastly improved transit) travel options that will be available to prospective area residents and their visitors.

Existing Travel and the Changing Travel Context

Furthermore, and importantly, existing trip making characteristics of the Humber Bay Shores area and other areas tributary to the new Park Lawn GO Station have been adjusted to reflect, as referred to previously, the increased:

1. internalization of trip making within the Humber Bay Shores area and extended local area given the expanded range of local trip destinations planned; and

2. level of transit accessibility provided for area residents and visitors to / from central Toronto and other key transit accessible destinations.

Existing area automobile use – and traffic volumes – have been adjusted (reduced) to reflect this positive shift in travel behaviour.

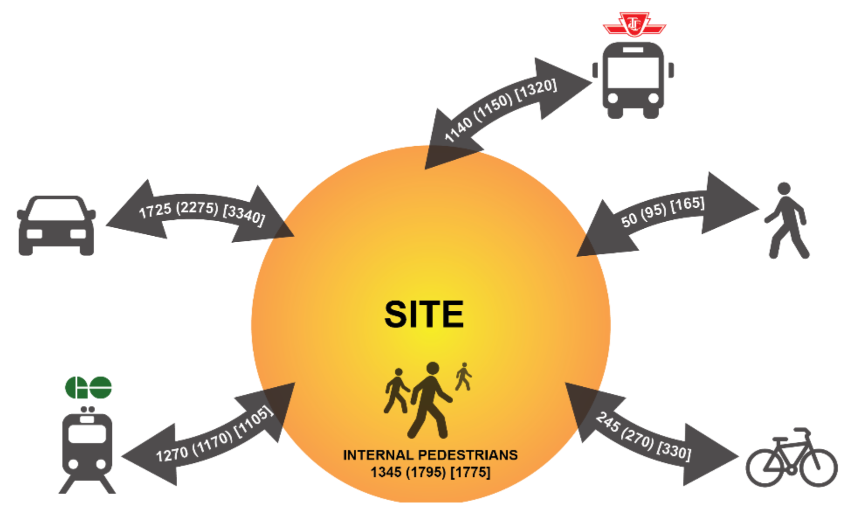


FIGURE 14: SITE TRAVEL DEMAND SUMMARY

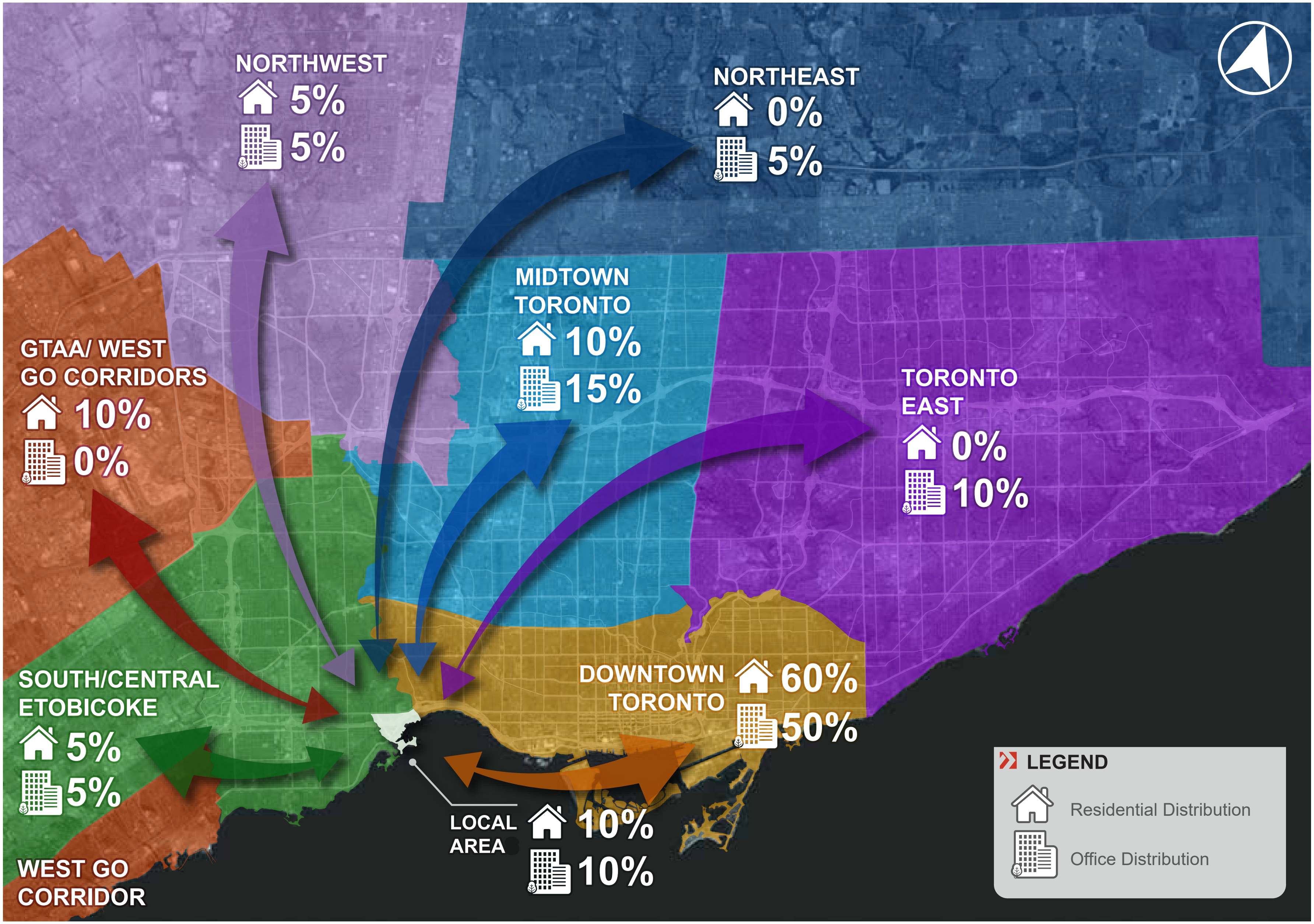


FIGURE 15 SITE TRAVEL DISTRIBUTION SUMMARY

A Complete Plan to Accommodate Future Mobility Needs

The 2150 Lake Shore Boulevard West Master Plan has been developed on a comprehensive basis to address the future travel needs of – not only the site itself – but of the surrounding area as it evolves. Consideration has – significantly - been given to addressing capacity and opportunity needs across all travel modes.

Significant transportation improvements are proposed across the area to address the future mobility demands of this area of South Etobicoke. These include the introduction of:

1. the new Transit Hub;
2. new public street connections / links;
3. a series of area street modifications; and
4. new and expanded integrated new bicycle and pedestrian networks.

This integrated series of new and improved transportation mobility initiatives will enable future travel demands of the 2150 Lake Shore Boulevard West development and broader surrounding area to be appropriately met over time.

Assessment and Analysis

Detailed traffic operations and other transportation assessments have been undertaken as part of the evaluation of area mobility improvement needs and determination of the proposed transportation networks.

Intersection Level of Service Analyses

Street intersection level of service (LOS) assessments have been undertaken on the planned area street system for future weekday and weekend peak hour periods. These assessments provide an indication of intersection performance under future conditions based upon average delays experienced by motorists and available capacities when travelling through an intersection.

Micro-Simulation Assessments

Detailed micro-simulation assessments of network operations have been developed based upon the City's future "do-nothing" conditions model integrating the proposed area network improvements and new site traffic activity generated by the 2150 Lake Shore Boulevard West Master Plan and area development. These detailed assessments provide a wide range of network performance measures including vehicles speeds, delays and travel times that offer indications of network performance.

The range of assessments undertaken confirm – based upon the results provided by these analyses – the adequacy of the proposed network to appropriately accommodate future traffic demands. These assessments will continue to be refined through the approvals process.

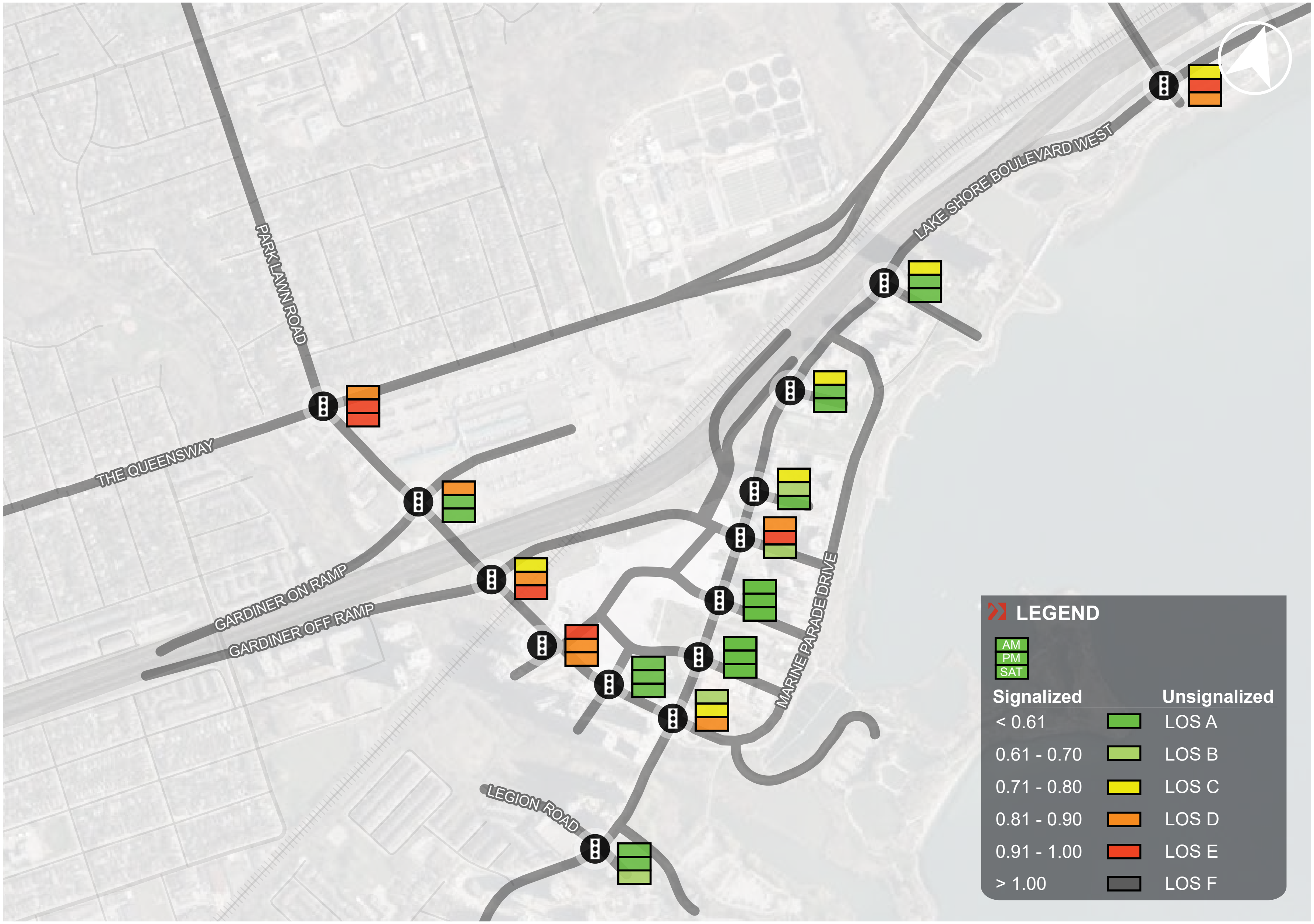


FIGURE 16 NETWORK OPERATIONS

V. STUDY APPROACH

This transportation study documents the substantial transportation analysis and design work that has been completed over the last three years in support of the progression of the planning framework that is being established to permit the re-development of the Christies Site. This study forms the basis of the Official Plan Amendment application to the City and future development approvals submissions for the envisioned Master Plan.

The focus of this study is to outline the proposed transportation infrastructure and operational initiatives that support non-automobile travel options for prospective residents, employees, patrons, and visitors to the Site. The study further demonstrates how vehicular needs associated with the development and surrounding area can be appropriately managed, and how increased travel demands could be met with the major transportation infrastructure deliverables proposed as part of the Master Plan.

A description of the transportation program supporting the Christies Site and the mobility strategies designed to significantly enhance and support transit, pedestrian, and bicycle travel for the Site are provided.

Details regarding the unique and complex configuration of the Site, including the positioning of the Park Lawn GO station and integrated transit services, the layout of public and private streets and consideration given to the arrangement of vehicular and multi-modal Site access points, and the positioning of facilities that support parking, servicing, and loading needs of all Site uses and buildings.

Multi-modal travel demand forecasts have been developed based upon person trip generation and interaction characteristics for each of the component land uses, changing travel characteristics (including origin / destination and mode choice considerations) for the Site and surrounding area considering the major transportation infrastructure proposed as part of the Master Plan, as well as the evolving planning and development landscape across Toronto.

These forecasts consider the urban, mixed-use nature of the proposed development and future urban context of the surrounding area, as well as new access to regional transit travel options along the adjacent major arterial corridors. They reflect mode share allocations based upon the introduction of key TDM measures and the urbanization of the existing uses.

Operational assessments have been undertaken for vehicular and transit travel modes assessing the way the current transportation systems operate across typical weekday and Saturday peak hour periods. This includes, logically, commentary on any pressure points, network strengths and / or weaknesses, and levels of congestion on the transportation networks that support the area today and in the future.

Analyses of future conditions have been undertaken to assess the way in which site travel demands would be absorbed and accommodated onto the changing area transportation system during the busiest periods of operation.

This includes a series of traffic operations analyses that aim to provide a quantifiable measure of changes and impacts that may occur in the future from a vehicular operations perspective as a result of this project and other area developments over time.

Pedestrian and cycling travel conditions have also been reviewed and assessed considering both existing and future conditions.

A brief outline of the structure of this study is as follows:

Planning and Policy

- A review of the relevant planning documents and framework outlining principles for growth, development and the future transportation context in west Toronto.

Transportation Context

- A review of existing and future transportation context of the site including road, transit, pedestrian, and cycling elements, considering the significant changes proposed as part of this Master Plan in combination with planned area initiatives.

The Master Plan

- An overview of the physical and transportation related elements of the Christies Site and the strategies that are to be employed to minimize automobile-dependent travel for prospective residents, employees, patrons, and visitors while meeting the practical and operational needs of a mixed-use development plan of significant scale.

Functional Site Plan

- A review of the vehicular elements of the Master Plan including vehicular access, loading, and parking provisions.

Mobility Assumptions

- An outline of existing and projected multi-modal travel characteristics for the component Site uses and surrounding area, recognizing the increasingly urban context of the Humber Bay Shores neighbourhood, the proposed mix of land uses, the surrounding area population, and its location relative to existing and planned transit services.

Travel Demand Forecasting

- An outline of travel demand projections for the component Site uses recognizing the increasingly urban context of the Site, the proposed mix of land uses, the surrounding area population, and the mobility assumptions established for the area.

Transit Hub Activity

- A particular focus on the projected future GO transit ridership resulting from Site and surrounding catchment areas of the Park Lawn GO station, and the multi-modal activity attributed to the new regional transit service provided on Site.

Multi-Modal Travel Assessment

- A review of existing and future transit service and ridership, and the ability for future transit to accommodate and adapt to the future transit travel needs of the Site and surrounding area.

- A review of existing street operations and current challenges in the network, and the future operating conditions without the proposed Master Plan and the infrastructure changes to be delivered.

- With the delivery of the Master Plan the future street network, changes are reviewed and the ability for the future network to absorb the proposed re-development of the Christies Site.

- A review of the existing and future pedestrian and cycling connectivity and conditions in the Site-surrounding area, contemplating the improvements delivered as part of the Site.

VI. SUMMARY OF STUDY FINDINGS

The following summarizes the key findings of this transportation study, which forms the basis of the Official Plan Amendment application to the City of Toronto and future redevelopment planning approval submissions with respect to the proposed Master Plan for the redevelopment of the Christies Site located at 2150 Lake Shore Boulevard West and 23 Park Lawn Road.

AN EVOLVING TRANSPORTATION CONTEXT

Secondary Plan Vision

- FCR and City of Toronto have been working in partnership for three years to establish a vision and future re-development plan for the Christies Site.

- FCR and City Staff recently reached a settlement on OPA 231 to re-designate the Site as Employment Regeneration lands.

- The City of Toronto will be leading the planning process to establish a Secondary Plan for the Site

- The site-surrounding area has been subject to multiple City of Toronto Secondary Plans and planning initiatives over many years, including:
    - Humber Bay Shores;
    - Mimico 20/20;
    - Mimico / Judson;
    - Park Lawn Lake Shore Transportation Master Plan (TMP).

- Transportation is a key factor when considering the redevelopment of the Site and in resolving a number of long-standing weaknesses and challenges in the mobility network.

Existing Context Challenges

- Site is located at the confluence of a number of regional transportation facilities as they cross the Humber River including:
  - the Gardiner Expressway and interchanges with Park Lawn Road;
  - two arterial streets Lake Shore Boulevard West and the Queensway;
  - the Lakeshore West GO rail corridor; and
  - the Martin Goodman multi-use trail system.

- Historic traffic congestion in the area due to traffic by-passing the Gardiner Expressway via Park Lawn Road / Lake Shore Boulevard West.

- Congestion levels at key points along Park Lawn Road and Lake Shore Boulevard West that are detrimental to the character and functionality of the streets as main streets serving Humber Bay Shores community.

- There is also a lack of quality transit options serving the area with area residents notwithstanding the presence of the Lake Shore West GO line.

- Travel undertaken in the Humber Bay Shores and surrounding area is predominately car focused given this factor.

- Poor north-south connectivity through the site and over the rail corridor and Gardiner Expressway.

- The Site is large and lacks porosity and connection to the surrounding area

Future Context Opportunities

- The Site's adjacency to the road and rail infrastructure presents unique and significant opportunity to improve existing transportation conditions by leveraging and improving access to the major transportation corridors.

- This is particularly of consequence in the context of the emerging Humber Bay Shores area which is to house over 25,000 people as it builds out over the next few years, as well as broader area population increases.

- Existing mobility challenges can be addressed through the provision of new and improved transit services, new street connections, urbanization of the existing street network and the expansion of active transportation connections, all of which can only be delivered as part of, or in conjunction with, redevelopment of the 2150 Lake Shore Boulevard.

- Central to the 2150 Lake Shore Site redevelopment is the introduction of a new Park Lawn GO Station on the Lakeshore West rail corridor and integrated TTC services.

- The Client is working with Metrolinx to advance the new Park Lawn GO Station, involving an update to the Initial Business Case and advancement of station design. Work has begun on initiating the required transit environmental assessment process to enable approval and implementation by approximately 2025.

- The new transit hub will provide for convenient and efficient passenger transfers and inter-change between existing and new LRT / streetcar and bus services that will link the facility to the surrounding communities.

A VISIONARY DEVELOPMENT PLAN

Master Plan Overview

- The Master Plan recognizes the opportunity and need to not only address current mobility weaknesses and challenges in the area but to transform mobility patterns in southeast Etobicoke.

- Primary infrastructure deliverables that will transform mobility patterns that will enable the Master Plan and community are:
  - Delivery of Park Lawn GO train station;
  - Realignment and integration of TTC streetcar and surface transit services at the mobility hub; and
  - Delivery of Relief Road corridor and relocation of Gardiner Expressway access ramps.

- Further infrastructure deliverables that will reshape the local urban fabric and integrate the Humber Bay Shores community are:
  - Re-characterization of the Lake Shore West corridor providing a Main Street to the community;
  - Delivery of a unique fine-grained local street system that structures a quality public / private realm; and
  - Connection of area recreational and active transportation networks available to the community and with the future centralized mobility hub.

- The major infrastructure moves permit the delivery of a Master Plan that creates a centre for Humber Bay Shores, providing a full range of land uses, facilities, amenities, places, spaces, parks and destinations that sustain a successful community.

Urban Plan Summary

- The combination of the key Master Plan infrastructure deliverables work together to create the opportunity to deliver a high quality public realm plan with an array of uses and unique features that form the heart of the southeast Etobicoke community.

- The delivery of approximately 42,500 square metres of commercial space across a range of types, shapes, and sizes including a “market” of street related retail, entertainment and eating establishments, and community-serving shops.

- The delivery of approximately 7,500 new residential units – creating an attractive community at the heart of southeast Etobicoke;

- The delivery of approximately 42,500 square metres of office space creating a true mixed-use community where site and area residents can live, work, and play; and

- The delivery of approximately 20,500 square metres of hotel and affiliated commercial space.

A NEW MOBILITY HUB

Transit Station Infrastructure

- The transit hub will serve as a major terminus and / or transfer point for area residents, commuters, and visitors of the site and wider community.

- In addition to high quality streetcar and bus transfer facilities, strong cycling and pedestrian connections to the station will further help encourage the use of active travel modes to travel from the adjacent neighbourhoods.

- The multi-modal transit hub will be oriented around a new Park Lawn GO Station located along the north boundary of the site.

- Travel times to downtown Toronto will be less than 15 minutes, making it a highly attractive travel time in the Toronto context; the relative ease of travelling to / from downtown Toronto and regionally via rail offers large benefits to those living / working / visiting the site.

- Modifying existing and adding new surface bus routes, in addition to the relocation of the TTC streetcar Humber Loop to the site may be introduced in response to the emerging transit opportunities in the area; these improved services would provide for a considerable level of transit connectivity and expand the GO station tributary area.

- Multiple accesses to the station are proposed to improve connectivity from all parts of the neighbourhood; access to the station will be provided on both sides of Park Lawn Road, from the Relief Road, and from Station Square

Regional Transit Access

- FCR have been working with Metrolinx to advance the development of a new Park Lawn GO station.

- Metrolinx GO Station platforms will span over Park Lawn Road and extend west to Mimico Creek; these platforms will be located on either side of the existing four-track Lakeshore West rail corridor and will be at the existing rail corridor elevation.

- Pedestrian access to the GO platforms will be provided via the mezzanine level (±84.00 metres) through a pedestrian tunnel approximately 5.0 metres beneath the rail corridor; a series of stairs and elevators will provide the vertical circulations elements to the to rail platforms (at 89.00 metres).

- Access to the mezzanine level (main station concourse level) is provided primarily from Station Square; a pedestrian entrance from Park Lawn Road, as well as entrances from the Relief Road and “Teamway” are also contemplated as part of the plan.

Surface Transit Integration

- The existing 501 Queen streetcar service (future Waterfront West LRT) will be improved and will route to / from the future multi-modal transit hub facility through the Site to provide the desired connectivity and integration with the rail and bus services.

- This new station will replace the existing Humber Loop and provide a new terminus that will help reduce bunching on an otherwise long route, and give the TTC the opportunity to provide a timed stop location.

- The streetcar / LRT facility along Lake Shore Boulevard would be enhanced as per current City plans to have a dedicated right-of-way through the Humber Bay Shores area to maximise efficiency and service potential.

- Two (2) 30 metre long streetcar platforms (in parallel orientation) are proposed at street level (±89.00 metres) to provide for separate waiting areas for two streetcar / LRT services, potentially with different headways.

- The parallel configuration of these platforms would be in a similar configuration as the existing streetcar platforms located at Broadview Station and Dundas West Station.

- They are located directly adjacent to the eastbound Metrolinx GO platforms to provide ease of access to / from the GO station and bus terminal and minimise transfer time and confusion.

- Access to the streetcar platforms (±89.00 metres) are provided primarily via the station square. Vertical circulation elements, which provide connections to the mezzanine (concourse) level, will be located within close proximity to the station platforms.

- The existing TTC Prince Edward (Route 66), Swansea (Route 77), and Queensway (Route 80) bus services are all candidates for Park Lawn GO Station tributary bus routes. Other possible new local routes may be introduced to better serve the Humber Bay Shores and / or Mimico neighbourhoods

- Termination of local and regional bus services at the new station allows for the opportunity to provide timed stops – coordinated with arriving / departing GO trains. The service schedules and frequencies of various bus routes may be complementary, allowing the sharing of bus platforms between different lines.

- Three (3) layby-style bus stops are proposed along the south side of the Relief Road (±79.00 metres). These stops would be located directly beneath the rail corridor, and direct connections to the station concourse can be provided

- The bus platforms located at the P1 level (±79.00 metres) will be directly adjacent to the “teamway”, which provides a weather protected waiting area for passengers, as well as direct connections to the mezzanine station concourse level (±84.00 metres) for general circulation.

A RESTRUCTURE OF ROADS

Major Corridor Delivery

- The Relief Road provides a second crossing of the Metrolinx rail corridor, and an alternative to the Park Lawn Road / Lake Shore Boulevard intersection when travelling between the westbound Gardiner off-ramp and the Humber Bay Shores community, relieving pressure of the Park Lawn Road / Lake Shore Boulevard signalised intersection.

- The new road also leverages the adjacency to the Gardiner Expressway to provide direct connections from the site's underground parking and loading entrances to / from both the eastbound and westbound expressway ramp terminals, minimising vehicular and truck traffic on adjacent roads such as Lake Shore Boulevard and Park Lawn Road.

- The Relief Road runs generally in a northwest-southeast direction between the Gardiner Expressway off-ramp at Park Lawn Road to Lake Shore Boulevard / Marginal Boulevard along the northern edge of the site property

- The Relief Road will form a new fourth leg to the existing signalised intersection at Park Lawn Road / Gardiner off-ramp; a new signalised intersection is proposed at Lake Shore Boulevard / The Marginal Road / Relief Road.

- Finally, the Relief Road capitalises on the adjacency to the Park Lawn GO station and alignment to provide immediate access to the multi-modal transportation hub for surface transit routes (e.g. buses).

- There are four (4) new intersections on the Relief Road.

- A three-legged signalised intersection will be formed approximately 280 metres east of the Park Lawn Road intersection to provide a signalised all-moves driveway access into the vehicular areas within the basement.

- A second STOP controlled right-in / right-out intersection is provided approximately 120 metres east of the signalised site driveway to provide secondary access into the underground loading / parking areas.

- A signalised three-legged intersection with the new relocated Gardiner on / off ramps is located approximately 110 metres west of the Lake Shore Boulevard and 170 metres east of the signalised site driveway.

- A fourth unsignalised, STOP controlled right-in / right-out site driveway is proposed approximately 40 metres east of the new signalised Gardiner ramp terminal access intersection.

Relocation of Expressway Access

- Highway ramp modifications are proposed for the eastbound Lake Shore Boulevard and Gardiner Expressway on-ramp and Gardiner Expressway off-ramp.
- Ramp relocated to improve connectivity to the proposed Relief Road.
- The realignment of these ramps opens up the area currently occupied by the footprint of the existing ramp terminal for future development.
- The existing on / off ramp that currently intersects with Brooker's Lane will be relocated to a new signalised intersection on the Relief Road approximately 110 metres west of the Lake Shore Boulevard / Relief Road intersection.
- The alignment of these ramps aim to minimise alterations to the tunnel section, abutments, piers, and decks of the Gardiner Expressway to avoid high costs and construction impacts to the highway.
- A signalised three-legged intersection is proposed where the ramp terminal meets the Relief Road; a right-turn lane and dual-left turn lanes are proposed for the Gardiner Expressway off-ramp, while two receiving lanes are proposed.
- Minor modifications are recommended at the westbound Gardiner Expressway on-ramp off Park Lawn Road to widen the on-ramp to achieve an additional receiving lane.

Re-Characterization of Existing Streets

- Lake Shore Boulevard West is classified as a major arterial street designed as an Avenue with a 36.0 metre right-of-way (ROW) on the Official Plan to accommodate for a separate transit right-of-way.
- A fully separated transit right-of-way adjacent to the site will be provided between Shore Breeze Drive and Brooker's Lane; the streetcar will continue to run in mixed-traffic east of Brooker's Lane and west of Shore Breeze Drive.
- New signalised intersections are proposed at all the planned / existing local Humber Bay Shores street intersections between Brooker's Lane and Park Lawn Road.
- The regularity of these signalised intersections (approximately 140 metres apart each) will provide frequent controlled pedestrian / cycling crossings, improving pedestrian safety and permeability across Lake Shore Boulevard.
- Lake Shore Boulevard will provide two (2) vehicular lanes in each direction with streetcar transit running in centre median.
- An off-street boulevard (raised) cycle track (minimum 1.8 metres wide with a 0.6 metre buffer to the roadway) has been incorporated into the design of Lake Shore Boulevard West.
- Wide boulevards have been incorporated into the design of Lake Shore Boulevard to provide for a high quality pedestrian and cycling realm.

Reinforcement of the Road Network

- A right-of-way (ROW) widening of approximately eight metres has been taken on from the 2150 Lake Shore Boulevard West property to fulfill the 36.0 metre ROW as designated in Toronto's Official Plan.

- South of the existing Westlake development signalised driveway to Lake Shore Boulevard, the pavement width of the road is approximately 20.0 metres and consists of two northbound lanes, two southbound left-turn lanes, one southbound through lane, and one southbound right-turn lane; no modifications to road cross section along this segment is proposed.

- It is proposed to modify the existing Park Lawn Road lane configuration between the existing Westlake development site driveway intersection and the Queensway in order to better suit the evolving requirements of the site and wider area and to enhance the existing conditions for all users.

- As part of the proposed 2150 Lake Shore Boulevard West development, an additional right-turn lane is proposed on the Queensway at the Park Lawn Road intersection to provide additional storage capacity

- The proposed widening would extend 175 metres west of the Park Lawn Road / Queensway intersection; the proposed widening would not impact the Mimico Creek crossing.

Prioritization of Local Streets

- The design of the loop road places transit first by ensuring that streetcar vehicles are able to travel to / from the new Park Lawn GO station with minimal delay and conflicts with other road users.

- Placing transit with a dedicated and separated transit lane will give transit priority and limit the impact that congestion may have on the level of service.

- The road has been designed to accommodate one-way vehicular traffic in an anti-clockwise direction, while accommodating transit in the opposite direction.

- The public loop road within the site is proposed to have a right-of-way width of 23.0 metres to accommodate the needs associated with the development while provide for ample boulevard space for pedestrians.

AN ACTIVE NETWORK

Cycling and Recreational Facilities

- The proposed development aims to introduce new and active access to site facilities that directly connect to key destinations (e.g. Park Lawn Station) and the surrounding area (e.g. adjacent neighbourhoods). Another fundamental aspect to the site plan includes forming convenient connections to the high quality existing recreational systems, such as the Martin Goodman Trail.

- New cycling connections will be made to / from major trail systems, key destinations, and accesses and entrances for seamless travel. Cycling routes will be planned that connect directly to the station platform access, which will contribute to the overall attractiveness of the Station.

- This cycling facility is located on the north side of the roadway, between the Relief Road and the Gardiner Expressway, and provides a direct connection to / from the bicycle parking area (basement level).

- Cyclists will be able to transfer between the designated bicycle parking area and facility through the support of a bridge that crosses over the Relief Road.

- The cycling-only facility will be elevated for the purpose of relieving cyclists from the considerably drastic elevation changes experienced at-grade. This bicycle design aims to reduce major slopes and create a safer / more comfortable experience for cyclists.

- The development of Loop Road provides an opportunity for a cycle track to be included for increased safety and comfort by cyclists and other active modes.

- This two-way cycle track facility will be located on the outer side of the loop, and allows the streetcar and vehicular traffic to function within a separate right-of-way. This physical separation increases safety for users.

- The Lake Shore Boulevard cycle tracks will operate along both sides of the roadway and supports the existing cycling network, notably between the Martin Goodman Trail in the southwest and the cycling lane in the east (at the Brooker's Lane / Lake Shore Boulevard intersection).

- There will be an increased number of crossings along the facility, located directly adjacent to the site (north side) for convenient access. The intersections at Loop Road will provide clear access for cyclists.

- The proposed site development provides an opportunity for a two-way cycle track facility to be built along the existing Park Lawn Road.

- The proposed private streets are essential connections that bridge major cycling facilities, such as Park Lawn Road, to the Loop Road facility. Specifically, the west segment presents an opportunity to provide shared, on-street access to / from the site and the broader cycling network.

A Pedestrian Focused Place

- The site aims to emphasize the public realm through the provision of new public and private streets that are well designed for diverse modes.
- Adjacent to these streets, the site will provide a great deal of urban spaces and places where residents, workers, and visitors can interact and explore. The development will ultimately foster a sense of community with its animated streetscapes and high street-level activity.
- The proposed development aims to provide relatively short, yet accessible crosswalks to enhance safety for pedestrians along busy roads. These crossings will help increase the permeability of the site and generally contribute to the improvement of the public realm.
- The proposed site presents the opportunity to incorporate a multi-use trail in the north side of the Relief Road to support a strong mix of pedestrians and recreational cyclists along this route.
- For maximized pedestrian access, additional sidewalks will be located on the south side of the Relief Road, directly adjacent to site entrances and buildings.
- Loop Road will be established as a complete street, which will integrate multi-modal facilities along the roadway. Wider sidewalks will be incorporated for increased comfort by pedestrians.
- There will be mid-block connections (e.g. extending from Loop Road to Block 'A') in order to increase connectivity and different route options throughout the site. This facility will generally provide strong connections to the development buildings and activity nodes.

AN INTEGRATED MOBIITY PLAN

- The proposed Master Plan is completely centred on TDM as it is integrated within the delivery of major transportation infrastructure that will significantly influence Site and area travel patterns, particularly with respect to transit choice through the delivery of the Park Lawn GO Station.

- All components of the Master Plan are centred on adopting TDM practices to achieve the following primary objectives:
  - Reducing demand on road infrastructure, thereby minimizing road and parking capital expenditures;
  - Increasing travel efficiency;
  - Reducing climate change emissions;
  - Improving air quality; and
  - Improving overall health.

- The objective can be achieved by influencing mobility choice and patterns through the following strategies:
  - Vehicle Parking Supply and Management;
  - Facilitation of Reduced Car Ownership and Usage;
  - Encourage Transit Use;
  - Encourage Bicycle Use;
  - Enhance Pedestrian Mobility;
  - Land Use and Building Infrastructure; and
  - Coordination, Communication and Promotion.

- Each strategy has possible measures that can and should be implemented as part of the planning, design, and operations of the Site and surrounding area; possible measures are categorized with respect to their implementation stage:
  - Infrastructure;
  - Facilities and features of the site plan and design;
  - Building operations / property management; and
  - Monitoring.

- In regards to implementation, there are three levels of influence and responsibility groupings:
  - City – broad infrastructure
  - Developer / Manager – site systems and facilities
  - Users – what people choose to do and how they use the systems

- The development and delivery of the TDM plan will be on-going and will integrate strategies into all aspects of the plan, planning, operation, and management of the Master Plan.

- A sample of the TDM measures are as follows:
  - Create a new multi-modal transit hub along the Lake Shore West GO corridor;
  - Minimize transit transfer times by creating an integrated transit station between streetcars, buses, and trains;
  - Collaborate with public transit agencies (TTC and Metrolinx) to coordinate and plan for service expansion;
  - Provide convenient access to bicycle parking in the new GO Station via the Relief Road;
  - Provide dedicated cycling facilities on adjacent streets;
  - Provide new crossing opportunities along adjacent streets increasing pedestrian permeability through the Site;
  - Consolidate vehicular accesses exterior to the Site, creating pedestrian oriented internal streets;
  - Widen sidewalks, and improved boulevards to improve the pedestrian realm and support pedestrian activity; and
  - Propose a variety of uses – employment, retail and residential– that allow people to meet multiple needs on Site.

A FUNCTIONAL URBAN PLAN

Site Access and Circulation

- The arrangements of the new arterial and local street system.

- With primary vehicular access to / from the Relief Road, the local internal public streets can prioritize people, transit, and cyclists.

- The consolidated design of the underground garage leverages the single ownership of the 2150 Lake Shore Boulevard West site to fully consolidate and integrate the parking to benefit the overall plan that would otherwise be separate and building specific.

- The placement of significant accesses on the perimeter of the plan also helps avoid large concentrations of traffic within the heart of the plan area, and offers greater opportunities to enhance the public realm.

Pick-Up / Drop-Off Needs

- The decrease in car parking demands has enable the rise in emerging ride sharing services such as Uber and Lyft.

- Although these services promote the reduction of overall vehicle use and ownership needs, they require space to allow for the associated pick-up / drop-off activities to occur in a safe and organized manner.

- Two user groups are generated by the Site redevelopment
    - Users who will use the pick-up and drop-off facilities and transition to the GO station; and
    - Users who will use the pick up / drop off facilities and transition to land uses within the development

- Pedestrian circulation and ease of use is a design consideration important to both user groups.

- The below-grade facility is located next to the vertical circulation that provides access to the station atrium at the mezzanine level.

Vehicle Parking Supplies

- Accesses to the main underground parking area is limited to the adjacent streets and consolidates access at a series of key, well designed facilities that avoids the proliferation of ramps, typical in conventional developments where each development block is considered individually.
- Access to the main underground parking area (Blocks A to E) will be provided via five (5) driveways: signalised driveways on the Relief Road and Park Lawn Road, right-in / right-out driveways on the Relief Road and Park Lawn Road, and one driveway on the east private street.
- The number of garage accesses will also add a layer of redundancy for access into the underground parking garage. A signalised driveway access at Brooker's Lane / Lake Shore Boulevard will provide access to the underground parking garage beneath Block F.

Bicycle Parking Supplies

- Continued refinement of the bicycle parking rates will occur through the design development and planning process to ensure that cycling demands are met.
- Where possible due to height clearances, long-term bicycle parking supply is proposed to be provided primarily on the mezzanine level with direct connections to building cores and circulation areas.
- Access to below-grade bicycle parking facilities will be provided primarily with bicycle parking stairs (shallow grade stairs with bicycle rails), bicycle ramps, or dedicated bicycle elevators.
- Short-term bicycle parking will be primarily located at-grade to improve visibility and convenience for visitors to the site.
- The provision of additional, convenient and enhanced bicycle parking facilities may help increase travel to / from the station by bicycle.
- To help achieve this, 5% cycling mode share is assumed for travel to / from Park Lawn GO station, generating the need for a minimum of 750 bicycle parking spots.
- The bicycle parking provided as part of the Park Lawn GO station facility will be located within the mezzanine level and can be access from the Relief Road multi-use path via a pedestrian / cycling bridge across the Relief Road, and from station accesses from Park Lawn Road and Station Square.

Loading and Servicing

- A centralised below-grade servicing network is being pursued for the development to consolidate access at a series of key driveway / ramps to avoid the proliferation of ramps

- A below-grade servicing network takes advantage of the single ownership of the 2150 Lake Shore Boulevard West site to provide dedicated off-street loading areas, well located and connected to all master plan buildings.

- Centralised loading areas will be provided for each block, or group of master plan buildings.

- The placement of key loading accesses on the perimeter of the plan helps avoid larger vehicles from activity travelling through the heart of the plan.
- Loading areas will require service connection tunnels located beneath public roads to access development blocks separated from the main loading accesses by public roads.

- Loading / servicing areas will be well located relative to building core and vertical circulation areas and will connect to them via loading corridors.

- It is proposed to meet the minimum loading requirements by block as outlined in Zoning By-law 569-2013.

THE INFLUENCE OF AREA TRAVEL PATTERNS

Major Transportation Network Changes

- Delivery of a new GO station that will have the capacity to accommodate expected ridership volumes resulting from new development on the Site as well as new riders from the surrounding neighbourhoods.

- Integration of area TTC streetcar / LRT and surface transit services with the new GO Station to establish a complete Transit Hub; this includes integrated supporting facilities for all modes of travel to / from the transit station.

- Delivery of the Relief Road that will serve as an alternate to Lake Shore Boulevard West and Park Lawn Road, which experience congestion today due to traffic bypassing the Gardiner Expressway.

- The new Transit Hub is expected to substantially improve transit travel times to various parts of the Toronto / GTA, for example:
  - Union Station: 40 minutes → 15 minutes;
  - Future East Harbour: 75 minutes → 20 minutes; and
  - St. Clair Station: 50 minutes → 15-20 minutes.

- To project how travel patterns for the Site and surrounding area will change from existing to future conditions, travel distribution by mode is reviewed by land use for the two general areas:
  - **Local Area**: inclusive of both the Site and the immediate residential areas within TTS Zone 285; and
  - **Greater Area**: inclusive of the peripheral areas considered to be impacted by the delivery of the transportation infrastructure (generally 2 to 3 km catchment area).

Local Area Mobility Assumptions

- Local Area travel characteristics are anticipated to be influenced by both distribution and mode share considerations including new transit access and strengthened connections to locations of Toronto / GTA, particularly downtown Toronto.

- With increasing development (employment, service, cultural) in western and eastern Toronto (ex. Liberty Village and future Unilever Site) and, in particular SmartTrack and GO RER major investments (new stations), there will be more attraction to the west and east sides of the City.

- Given the proposed mixed-use nature of the Site, a large component of trips are expected to be to / from other land uses within the Local Area itself (i.e. internal interaction).

- The adopted future travel characteristics of Local Area trips was estimated based on the foregoing considerations, as well as projected travel time benefits associated with the new station, and connection to active transportation systems.

- A comparison with proxy areas with similar access considerations was also utilized in determining appropriate mode shares and distributions.

- The Local Area (including Site) is projected to see a resultant change in mode share as follows:
  - Auto Driver: 60% existing → 30% future
  - Auto Passenger: 5% existing → 10% future
  - GO Transit: 0% existing → 25% future
  - Local Transit: 30% existing → 25% future
  - Active: 5% existing → 10% future

Greater Area Mobility Assumptions

- The Greater Area includes the following zones established based primarily on existing and future transit access considerations, TTS Zones and Census Tracts (CT):
  - **Primary Area**: located west / southwest of the site includes TTS Zones 286, 287, and 288, corresponding with CT 5350200.01, 5350200.02, 5350201.00, 5350202.00 and 5350209.00
  - **Secondary Area**: located north / northwest of the site includes TTS Zones 301, 302, 303, 304, and 305, corresponding with CT 5350215.00, 5350216.00 and 5350217.00
  - **Tertiary Area**: located northwest of the site and includes TTS Zones 306 and 315, corresponding with CT 5350218.00 and 5350219.00
  - **Peripheral Area**: located northeast of the site and comprises TTS Zone 122, corresponding with CT 5350050.01

- A similar shift with respect to distribution and mode share is expected for the Greater Area, due to the factors including increasing development in west and eastern Toronto along with SmartTrack / GO RER major investments, and projected travel time benefits associated with the new station.

- While the areas are not in the direct vicinity of the proposed GO station, the station will still be readily accessible, particularly via local transit, pick up / drop off and bicycle.

- The convenience of the GO train as a travel option, in conjunction with the abovementioned increasing development and transit investments, is still expected to influence travel distributions with an increase towards Downtown Toronto.

- The Primary Area is projected to see a resultant change in mode share as follows:
  - Auto Driver: 59% existing → 45% future
  - Auto Passenger: 7% existing → 5% future
  - GO Transit: 6% existing → 15% future
  - Local Transit: 21% existing → 25% future
  - Active: 7% existing → 10% future

- The Secondary Area is projected to see a resultant change in mode share as follows:
  - Auto Driver: 51% existing → 35% future
  - Auto Passenger: 7% existing → 5% future
  - GO Transit: 3% existing → 20% future
  - Local Transit: 33% existing → 30% future
  - Active: 6% existing → 10% future

- The Tertiary Area is projected to see a resultant change in mode share as follows:
  - Auto Driver: 48% existing → 35% future
  - Auto Passenger: 8% existing → 5% future
  - GO Transit: 0% existing → 10% future
  - Local Transit: 29% existing → 30% future
  - Active: 15% existing → 20% future

- The Peripheral Area is projected to see a resultant change in mode share as follows:
  - Auto Driver: 47% existing → 40% future
  - Auto Passenger: 9% existing → 10% future
  - GO Transit: 0% existing → 5% future
  - Local Transit: 32% existing → 30% future
  - Active: 12% existing → 15% future

THE FORECAST OF TRAVEL DEMANDS

Local Area Travel Projections

- Local Area includes both the Site and the immediately adjacent neighbourhoods (existing and planned) of Humber Bay Shores and Park Lawn Road, the area defined by TTS Zone 285.

- Local Area travel demands are forecast based on person-based trip forecasting methodologies with consideration given to internal capture synergies and pass-by characteristics for each land use.

- Trip distribution and mode share assumptions established for the Local Area are then applied to the forecast travel demands.

- Local Area office person trips consider Site office uses only (i.e. no office uses considered in the adjacent community); the Site office of approximately 41,924 square metres GFA is forecast to generate 610, 585, and 125 gross person trips (two-way) during the weekday morning, afternoon, and Saturday peak hours, respectively.

- Local Area residential gross person trips are forecast as follows:
  - 3,720, 3,350 and 3,350 two-way trips generated by the proposed Site residential development of 7,455 units during the respective peak hours;
  - 1,725, 1,555 and 1,555 two-way trips generated by the background residential developments of 3,450 units.

- To assess changes to the existing Local Area residential population, 3,455, 3,110 and 3,110 gross person trips (two-way) are generated for interaction and mode share change considerations.

- The proposed hotel land use with an assumed 350 rooms is forecast to generate 350, 350 and 350 two-way trips during the respective peak hours.

- Local Area retail person trips consider Site retail uses only (i.e. no retail uses considered in the adjacent community); the Site retail of approximately 42,701 square metres is forecast to generate 2,135, 5,125, and 5,980 gross person trips during the respective peak hours.

- Interaction trips between the Site land uses and adjacent area residential uses is based on the Local Area trip distribution established for each land use.

- The Local Area interaction (i.e. local) distribution assumptions are as follows:
  - 10% of office trips are made to / from the local area during the weekday morning, afternoon, and Saturday peak hours.
  - 10%, 15% and 15% of residential trips are made to / from the local area during the weekday morning, afternoon, and Saturday peak hours, respectively.
  - 10% of hotel trips are made to / from the local area during the weekday morning, afternoon, and Saturday peak hours.
  - 90%, 75% and 50% of retail trips are made to / from the local area during the weekday morning, afternoon, and Saturday peak hours.
  - 40% of total retail interaction trips are considered internal interaction and 60% are considered linked interaction.

- The Site is forecast to generate the following:
    - 6,815, 9,410 and 9,805 gross person trips;
    - 1,345, 1,795 and 1,775 internal interaction person trips;
    - 1,040, 2,650 and 1,770 linked interaction person trips; and
    - 4,430, 4,965 and 6,260 external person trips

- The Adjacent Area (within Local Area) is forecast to generate the following:
    - 5,180, 4,665 and 4,665 gross person trips;
    - 515, 695 and 695 internal interaction person trips; and
    - 4,665, 3,970 and 3,970 external person trips

- Distribution and mode shares established for each land use were applied to the forecast external person trips; all internal person trips are assumed to be made by foot.

- The Site office distribution and mode share assumptions result in the following external trips:
    - 175, 170 and 40 auto trips;
    - 320, 300 and 70 transit trips; and
    - 55, 55 and 0 active trips.

- The Site residential distribution and mode share assumptions result in the following external trips:
    - 1,265, 1,070 and 1,070 auto trips;
    - 20, 15 and 15 pudo trips;
    - 1,860, 1,585 and 1,580 transit trips; and
    - 205, 175 and 180 active trips.

- The Site hotel distribution and mode share assumptions result in the following external trips:
    - 120, 120 and 120 auto trips;
    - 180, 180 and 180 transit trips; and
    - 15, 15 and 15 active trips.

- The Site retail distribution and mode share assumptions result in the following external trips:
    - 145, 590 and 1,545 auto trips;
    - 50, 170 and 445 transit trips; and
    - 20, 80 and 220 active trips.

- The Adjacent Area residential distribution and mode share assumptions result in the following external trips:
    - 1,745, 1,465 and 1,495 auto trips;
    - 25, 20 and 25 pudo trips;
    - 2,615, 2,240 and 2,210 transit trips; and
    - 280, 245 and 240 active trips.

- Overall, including interaction trips made by walking, the total Site travel demand forecasts are summarized as follows:
    - 1,708, 2,260 and 3,325 auto trips;
    - 20, 15 and 15 pudo trips;
    - 2,410, 2,325 and 2,425 transit trips; and
    - 2,680, 4,810 and 4,040 active trips.

Greater Area Travel Changes

- Greater Area includes the peripheral areas that are considered to be impacted by the delivery of the transportation infrastructure proposed as part of the Master Plan, particularly the Park Lawn GO station.

- The Greater Area forecasting is based on population (census data), existing TTS travel characteristics, residential trip generation adopted for this study, and future distribution and mode share changes resulting from the proposed transportation infrastructure.

- The mobility assumptions established for the four zones (Primary Area, Secondary Area, Tertiary Area, and Periphery Area) are applied to the forecast travel demands.

- The Primary Area resultant mode share characteristics are forecast to change as follows:
    - Auto: 66% to 50%;
    - Transit: 27% to 40%; and
    - Active: 7% to 10%

- The Primary Area resultant overall change in vehicle trips is in the order of -250; the change to GO trips is in the order of +200.

- The Secondary Area resultant mode share characteristics are forecast to change as follows:
    - Auto: 58% to 40%;
    - Transit: 36% to 50%; and
    - Active: 6% to 10%

- The resultant overall change in vehicle trips is in the order of -400; the change to GO trips is in the order of +450.

- The Tertiary Area resultant mode share characteristics are forecast to change as follows:
    - Auto: 56% to 40%;
    - Transit: 29% to 40%; and
    - Active: 15% to 20%

- The resultant overall change in vehicle trips is in the order of -100; the change to GO trips is in the order of +100.

- The Periphery Area resultant mode share characteristics are forecast to change as follows:
    - Auto: 56% to 50%;
    - Transit: 32% to 35%; and
    - Active: 12% to 15%

- The resultant overall change in vehicle trips is in the order of -150; the change to GO trips is in the order of +50.

- For specific changes to the street network volumes, the distribution characteristics for each area were considered.

THE PROJECTION OF STATION ACTIVITY

- Based on the Local Area (inclusive of the proposed Master Plan and surrounding Humber Bay Shore community) and Greater Area travel demand forecasts, GO ridership projections have been quantified for the weekday and weekend hours of analysis.

- It is estimated that the Local Area (Site and adjacent community) will generate approximately 2,640, 2,370 and 2,260 GO riders (two-way) during the weekday morning, afternoon, and Saturday peak hours, respectively.

- It is estimated that the Greater Area (larger catchment area) will generate 1,185, 1,055 and 1,085 GO riders (two-way) during the respective peak hours.

- The total projected station activity is therefore 3,825, 3,425 and 3,345 two-way riders during the respective peak hours.

- In order to understand travel characteristics to / from the Park Lawn GO station from the Greater Area, travel surveys conducted at other existing GO stations were reviewed.

- Based on the GO station comparison, prospective riders are forecast to travel to / from the new Station as follows:
    - 30% use local area transit;
    - 5% travel by bike;
    - 60% walk; and
    - 5% pick-up / drop-off.

- Overall, considering Local Area and Greater Area projected GO transit riders, the Park Lawn GO station is forecast to generate riders traveling to / from the station as follows:
    - 2,455, 2,230 and 2,120 walking;
    - 180, 150 and 150, cyclists;
    - 1,045, 915 and 935 local area transit; and
    - 145, 130 and 140 pick-up / drop-off

- The above multi-modal station activity forecasts area considered in the Park Lawn GO station design, ensuring access and transfers between all modes of travel are accommodated and facilitated on Site.

- Specific design considerations for each mode are as follows:
    - Cyclists: sufficient bicycle parking spaces provided, and connection from area street cycling facilities to station bicycle parking area provided.
    - Pedestrians: safe and numerous crossing opportunities of the area street system with connection to the station, and attractive and visible pedestrian entrances.
    - Local Area Transit: seamless integration between LRT and GO train platforms, provision of bus-laybys, and connecting considerations
    - Pick-Up / Drop-Off: vehicle pick-up / drop-off area provided below grade with direct connection to / from Relief Road and Park Lawn Road, and with sufficient capacity.

AN ASSESSMENT OF TRANSIT TRAVEL CONDITIONS

Existing Service and Access

- Although major transit infrastructure (i.e. Lakeshore West GO line) currently passes through the Site-surrounding area, there is a lack of access to the higher-order transit corridor.
- The nearest access to the Lakeshore West GO line is Mimico Station, approximately 2 kilometres west of the Site.
- As such, area residents currently rely upon the TTC 501 Queen streetcar service and surface bus routes for transit connectivity, which involves extended travel times.
- Currently, four transit services in the vicinity of the Site provide connection to Downtown Toronto with travel times ranging from 40 to 60 minutes:
  - The 66 Bus with a connection to the Line 2 Subway
  - The 145 Express Bus;
  - The 176 bus with a connection to the Lakeshore GO Rail; and
  - The 501 streetcar.
- Based on typical weekday morning peak hour travel times, there is currently a significant disadvantage to taking transit to downtown Toronto; personal vehicle travel times are currently in the order of 20 to 40 minutes via the Gardiner Expressway.
- The GO line has a current ridership of approximately 3,360 and 2,765 during the weekday morning and afternoon peak hours, equivalent to peak hour, peak direction capacities of 40 to 60%.
- Area surface transit services currently operate at capacity levels of generally less than 60 to 70%.

Future Improvements

- The advancement of transit service in the area through the introduction of a new mobility hub integrating the Park Lawn GO Station and TTC streetcar and surface transit services is central to the redevelopment of the Site.
- The proposed Transit Hub will alter transit access and transit use in the Site-surrounding area; with particular attention given to quality service integration, to the provision of convenient and efficient passenger transfers, and to inter-change between all services and travel modes – greater area influence (beyond Humber Bay Shores) will be achieved.
- Introduction of the Park Lawn GO Station will greatly improve commuter rail travel options east and westbound along the Lakeshore GO corridor and, in particular, provide travel times to downtown Toronto of less than 15 minutes.
- The significantly improved transit travel times to downtown Toronto will make transit a highly competitive and attractive means of travel in comparison to the personal vehicle.
- This level of transit access and service has not been afforded to the area in the past and will attract the vast majority of travel needs of the future Site development and Humber Bay Shores community.
- Note that without the proposed Site redevelopment, area transit improvements are limited to RER improvements considering the transit access and connectivity today (i.e. Mimico Station).

Future Service and Activity

- With delivery of the Master Plan the Site and surrounding area will have new access to the Lakeshore West GO line via the Park Lawn GO station.

- Re-alignment and integration of the TTC 501 Queen streetcar is also proposed as part of the station design and delivery.

- There is also substantial opportunity to modify existing and add new surface bus routes – bus bays and transfer facilities along the Relief Road are proposed as part of the station and road infrastructure delivery.

- It is recommended, in the least, to modify the following bus routes in order to respond and capitalize upon the transit accessibly afforded by the new Park Lawn GO station:
  - Prince Edward Route 66;
  - Queensway Route 80; and
  - Swansea Route 77.

- Future developments in the Local Area are projected to generate in the order of 590, 530 and 490 trips to / from the Park Lawn GO station in the weekday morning, afternoon, and Saturday peak hours, respectively.

- Existing residents in the Local Area are projected to generate in the order of 1,965, 1,720 and 1,750 trips to / from the Park Lawn GO station during the respective peak hours.

- Transit travel demands are also expected to change across greater southeast Etobicoke; the greater catchment area of the station is projected to generate 1,965, 1,720 and 1,750 trips to / from Park Lawn GO in the respective peak travel hours.

- The proposed Master Plan is projected to generate in the order of 2,410, 2,325 and 2,425 transit riders (two-way) during the weekday morning, afternoon, and Saturday peak hours, respectively, with approximately 1,270, 1,175 and 1,105 traveling to / from the Park Lawn GO station.

- In total, the Park Lawn GO is projected to attract 3,825, 3,425 and 3,345 two-way transit riders during the weekday morning, afternoon, and Saturday peak hours, respectively.

- The substantial projected increase in GO transit ridership associated with background development, Site development, and existing area travel changes, will exceed current capacity in the peak hour peak directions.

- As part of the Metrolinx RER and future GO expansion investments, additional capacity will be provided along the Lakeshore West GO line that will respond and accommodate future ridership demands.

- Of the total projected GO transit riders, 1,045, 915 and 935 are projected to arrive at / depart from the Park Lawn GO station by means of other local area transit connections.

- The TTC streetcar and surface bus routes will respond to support and accommodate the increasing transit demands.

- Park Lawn GO is projected to generate 2,455, 2,230 and 2,120 riders connecting by foot, 180, 150 and 150 riders connecting by bike, and 145, 130 and 140 riders connecting by vehicle pick-up / drop-off; access and transfers between all modes have been considered in the Park Lawn GO station design.

AN ASSESSMENT OF VEHICULAR TRAVEL CONDITIONS

Existing Constraints

- Traffic congestion is a long-standing issue in the area given the proximity of the Lake Shore Boulevard West corridor to the Gardiner Expressway.
- Volumes on the Gardiner Expressway can result in motorists diverting to and using the area roads to bypass the congestion.
- The Gardiner Expressway overpass, the rail overpass and Lake Ontario limit the available outlets from the area, with Park Lawn Road serving as the only major north-south connection in the vicinity.
- Generally, the above results in increased congestion along the Park Lawn Road and Lake Shore Boulevard West corridors, that are detrimental to the character and functionality of both streets as main streets serving the Humber Bay Shores community.
- Further to the above, whilst the area road network is currently operating within theoretical capacity, there are a number of intersections / movements which are approaching capacity, including:
    - The Park Lawn Road / The Queensway intersection under all analysis periods;
    - The Park Lawn Road / Lake Shore Boulevard West intersection under all analysis periods;
    - Gardiner Expressway ramp terminals primarily during the AM and PM peak hours; and
    - Eastbound movements along the single-lane section of Lake Shore Boulevard West during the AM peak hour.

Future Conditions without Site Re-development

- The Future Background area street network is considered to generally remain as per existing conditions, however with the following improvements planned through area developments:
    - Lane configuration changes at the Park Lawn Road / Gardiner Eastbound Off Ramp / Legion Road and the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersections;
    - Signalization of the Lake Shore Boulevard West / Silver Moon Drive intersection; and
    - Turn restrictions of right in/right out at the Lake Shore Boulevard West / Shore Breeze Drive and Lake Shore Boulevard West / The Marginal Boulevard intersections.
- The Humber Bay Shores and surrounding area is planned to develop adding in the order of 10,600 residential units.
- Without redevelopment of the Site, area developments and existing neighbourhoods will continue to have travel characteristics similar to existing conditions (i.e. without the added benefit of increased higher-order transit access, new road infrastructure and increased internalized trip making).
- Under Future Background conditions a number of intersections are projected to exceed theoretical capacity, in particular:
    - The Park Lawn Road / The Queensway intersection during all analysis periods;
    - The Park Lawn Road / Gardiner Westbound On Ramp during the AM peak hour; and
    - The Lake Shore Boulevard West / Gardiner Eastbound On Ramp and Westbound Off Ramp during the AM and PM peak hours.

Future Network Changes with Site Re-development

- With re-development of the Site, the following major area street network changes will be delivered and have been considered in the Future Total traffic scenario:
  - Construction of a four-lane road (Relief Road) across the north end of the Site, extending from Park Lawn Road to Lake Shore Boulevard West, connecting Gardiner Expressway access ramps;
  - Realignment of Gardiner Expressway access ramps to terminate at the Relief Road at a signalized intersection;
  - Construction of an internal road network including two connections to Park Lawn Road, two connections to Lake Shore Boulevard West and one connection to the Relief Road; and
  - Reconfiguration of Lake Shore Boulevard West to provide cycling lanes and realign the existing streetcar tracks to a central, separated right-of-way along the Site boundary.

- The delivery of the Relief Road and realignment of the Gardiner Expressway ramps are considered key pieces of infrastructure that will alleviate pressure along the Park Lawn Road and Lake Shore Boulevard West corridors along the Site boundaries.

- The delivery of the Park Lawn GO Station and integrated mobility hub will influence area street network traffic volumes through influencing mode choice of existing and future area residents.

- As well the introduction of a range of land uses will influence area travel patterns through the internal synergy and interaction that will take place between uses, influencing trip length and direction of travel.

Future Conditions with Site Re-development

- With delivery of the proposed Master Plan and associated infrastructure, background development travel forecasts were re-established with consideration given to the following:
  - Interactions associated with the mixed use nature of the site;
  - Projected mode split shifts associated with the construction of the transit station; and
  - Diversions available along road infrastructure proposed to be constructed as part of the site development.

- As a result of the new Transit Hub, Greater Area traffic activity is projected to decrease by approximately 2,100, 1,895 and 1,925 vehicle movements during the morning, afternoon and Saturday peak hours respectively; a portion of the above reduction will be associated with the study area, resulting in a decrease in traffic volumes on the study area road network.

- The Master Plan is proposed to generate in the order of 1,390, 1,810 and 2,645, two-way vehicle trips during the weekday morning, afternoon, and Saturday peak hours; the new Park Lawn GO Station is forecast to generate 145, 130, and 140 two-way pick-up / drop-off trips on the Site.

- Overall, the road network is projected to operate within capacity under Future Total conditions, noting the benefit of the projected mode shift associated with the transit station, the new infrastructure, and lane configuration changes proposed as part of the proposed development.

- Notable is the relief along the Park Lawn Road and Lake Shore Boulevard corridors along the Site boundaries, particularly as a result of the implementation of the Relief Road.

Key Intersection Operations and Recommendations

- Intersection-specific recommendations are also made under Future Total conditions, in addition to the greater transportation network changes being delivered through the Master Plan; each recommendation and operational impact is briefly summarized below.

- At the Park Lawn Road / The Queensway intersection it is recommended to introduce an additional eastbound right turn lane.

- With the above recommendation, the intersection is projected to operate below theoretical capacity during all peak hours.

- At the Park Lawn Road / Gardiner Westbound On Ramp intersection it is recommended to introduce an additional northbound left turn lane and to increase the signal cycle length, consistent with the cycle length recommendation for at the Park Lawn Road / Gardiner Eastbound Off Ramp intersection.

- With the above recommendation, the intersection is projected to operate below theoretical capacity during all peak hours.

- At the Park Lawn Road / Gardiner Eastbound Off Ramp intersection an east leg to the intersection will be introduced with the delivery of the Relief Road.

- It is also recommended to introduce an additional northbound through lane along Park Lawn Road and to increase the signal cycle length.

- With the above recommendation, the Park Lawn Road / Gardiner Eastbound Off Ramp intersection is projected to operate below theoretical capacity during all peak hours.

- At the Park Lawn Road / Lake Shore Boulevard West intersection it is recommended to convert the existing northbound left / through lane to a northbound left turn lane and remove the existing split signal phasing, allowing for a more efficient spread of available time.

- With the above recommendation, the intersection is projected to operate below theoretical capacity during all peak hours.

- With the delivery of the Relief Road and Gardiner ramp relocation, the Gardiner Expressway will no longer directly connect with Lake Shore Boulevard West.

- As a result the traffic volumes at the Lake Shore Boulevard West / Brookers Lane intersection will significantly change (decrease) – it is projected to operate below theoretical capacity during all peak hours.

- The new signalized intersections at the Relief Road / Gardiner Eastbound On Ramp and Westbound Off Ramp and Relief Road / Lake Shore Boulevard West are projected to operate below theoretical capacity during all peak hours.

AN ASSESSMENT OF ACTIVE TRAVEL CONDITIONS

Existing Conditions

- The Site is located in the vicinity of a number of recreational facilities and trails including: the Humber Bay Shores Park, the Humber Bay Park East and West Parks, Jean Augustine Park, and Martin Goodman Trail.
- Currently the Site and surrounding area lack connectivity due to large infrastructure in the area (Gardiner Expressway, GO rail corridor) and the lack of crossing opportunities across adjacent arterial corridors.
- The Site is currently a large, impermeable block with approximately 500 metres frontage along Lake Shore Boulevard West and Park Lawn Road.
- Currently the 500-metre frontages do provide sidewalk facilities, however the overall pedestrian condition is poor and reflects the former industrial context of the Site.
- The Site, given its location and current form, disconnects the communities along Lake Shore Boulevard West (Humber Bay Shores) and Park Lawn Road.
- There are no roads or trails across the Site today, and signal spacing along Lake Shore Boulevard West extends, in some locations, approximately 350 metres.
- The Site-surrounding area is well located with respect to recreational and active transportation systems, however the area lacks pedestrian and on-street cycling facilities to provide safe, convenient access to the facilities.

Future Improvements

- Delivery of the Relief Road, connecting Park Lawn Road and the Gardiner Expressway, will re-distribute traffic permitting the prioritization of public realm and non-auto travel along internal and adjacent streets.
- Lake Shore Boulevard West will be re-characterized as a main street across the Humber Bay Shores community with active, street-related frontages, in-boulevard cycle tracks, and dedicated transit rights-of-way.
- The Master Plan proposes to deliver a series of new street infrastructure and active transportation linkages to integrate the Site within the Humber Bay Shores community.
- Crossing opportunities for cyclists and pedestrians will be introduced to the area with four new traffic signals proposed along Lake Shore Boulevard West and Park Lawn Road, creating a regular, urban interval of crossing opportunities.
- The proposed cycle track will extend from Park Lawn Road to Brookers Lane, connecting to a series of cycling facilities along the Site internal street system and the Relief Road.
- The Master Plan will drastically change the pedestrian and cycling context across the Humber Bay Shores community; the level of connectivity and public realm improvements afforded by the Master Plan will significantly facilitate and encourage active travel options for both local and greater area trips.

Future Activity

- It is projected that the Site will generate in the order of 2,435, 4,540, and 3,710 pedestrian trips (two-way) during weekday morning, afternoon, and Saturday peak hours, respectively, inclusive of primary trips, internal trips, and pass-by trips.

- Existing and future development in the Local Area is also projected to generate in the order of 540, 715 and 720 pedestrian activity (two-way trips) during the respective peak hours, inclusive of primary and internal trips; the adjacent communities will therefore also see an increase in local pedestrian activity as a result of future interaction with the proposed Site uses.

- The proposed Park Lawn GO will also anchor transit-related pedestrian and cycling activity in and around the Site.

- It is projected that the Site will generate in the order of 2,410, 2,325, and 2,425 transit-based pedestrian trips (two-way) during the respective peak hours.

- Transit-based pedestrian trips (two-way) for the Local and Greater Areas are projected to be in the order of 2,345, 2,025, and 1,995 during the weekday morning, afternoon, and Saturday peak hours, respectively.

- Pedestrian activity resulting specifically from transfers between GO transit at the new Park Lawn GO station and all other modes of travel are projected to be approximately 1,370, 1,195, and 1,225 two-way trips during the respective peak hours.

- Emphasis was placed on the Transit Hub design to improve the ease of transfers between bus stops, streetcar platforms and the GO platforms.

- The Site is projected to generate in the order of 245, 270, and 330 cycling trips (two-way) during the weekday morning, afternoon, and Saturday peak hours, respectively.

- The adjacent Local Area community is also projected to generate cycling activity in the order of 255, 225 and 215 two-way primary trips during the respective peak hours.

- Primary cycling trips are anticipated to be made predominately along Lake Shore Boulevard West and the Martin Goodman / Humber Bay Park Trail system.

- Transit-based cycling trips generated by both the Local and Greater Area are projected in the order of 180, 150, and 150 two-way trips during the respective peak hours.

- High quality, connected cycling facilities provided to the station bicycle parking facilities will help support the anticipated demand and make cycling a viable first and last mile mode of transportation.

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PROPOSED MIXED-USE DEVELOPMENT

TORONTO, ONTARIO

Urban Transportation Considerations

Official Plan Amendment Application

Volume 2: Technical Study

Prepared For: CPPIB Park Lawn Canada Inc.
FCR (Park Lawn) LP

SEPTEMBER 2019

BA Group

45 St. Clair Avenue West, Suite 300
Toronto, ON M4V 1K9
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TABLE OF APPENDICES

The Appendices are included in Volume 3.

1.0 INTRODUCTION

BA Group is retained by FCR (Park Lawn) LP and CPPIB Park Lawn Canada Inc. (herein referred to as "FCR", "CPPIB", or "the Client") to provide urban transportation consulting services in relation to the redevelopment of the former Christies cookie factory site, comprising municipal addresses 2150-2194 Lake Shore Boulevard West and 23 Park Lawn Road (herein referred to as "the Site", "the Christies Site", or "the 2150 Lake Shore Site").

This transportation study has been prepared by BA Group on behalf of the Client, in support of an Official Plan Amendment application for the redevelopment of the Site. This document is also intended to provide input into the City's Secondary Plan for the site and immediately adjacent lands.

The Site, which is located at the northeast quadrant of the Lake Shore Boulevard West / Park Lawn Road intersection in southeast Etobicoke, will be undergoing a City of Toronto-led Secondary Plan process to establish a comprehensive vision for both the Site and surrounding area.

The Site location is illustrated in **Figure 1.**

This transportation study has been separated into three volumes as follows:

- **Volume 1: Executive Summary**
- **Volume 2: Technical Study**
- **Volume 3: Appendices**

1.1 PLANNING AND POLICY CONTEXT

West Toronto, and specifically south Etobicoke, has been the subject of much City planning initiative to revitalize and redevelop the site-surrounding area including Humber Bay Shores and Mimico 20/20. Given its size and location, the Christies Site has a significant role to play in the future vision of this area, with a unique ability to influence not only the urban fabric of the Humber Bay Shores neighbourhood but the mobility patterns of the surrounding area.

FCR has been working in partner with the City of Toronto over the past three years to set the planning framework to establish a vision and future re-development Master Plan for the Christies Site, in coordination with the active planning work occurring in the site-surrounding area.

An overview of the planning context is provided in the following.

OPA 231 Settlement

The Client and the City of Toronto recently reached a settlement with respect to the City of Toronto Official Plan Amendment No. 231 (herein referred to as “OPA 231”), a milestone achievement in moving forward for the Site. Both parties have been involved in settlement discussions since 2016.

Park Lawn Lake Shore Transportation Master Plan

A key study is being conducted by the City of Toronto to identify and plan for the transportation network improvements that will address existing issues and accommodate future growth in the area surrounding the 2150 Lake Shore Boulevard Site. The Park Lawn Lake Shore Transportation Master Plan (PLLS TMP) will provide the framework and approvals for not only road improvements in the area surrounding the 2150 Lake Shore Site, but also for a road network on the Site.

The City of Toronto initiated the PLLS TMP Study for the Park Lawn / Lake Shore area in 2016, to evaluate and plan for transportation options that address existing deficiencies and accommodate increases in population and employment in the area.

The PLLS TMP will follow the Municipal Class Environmental Assessment (EA) process, to identify the transportation problems and opportunities, and to develop, evaluate and recommend alternatives to address the identified problems and opportunities.

The PLLS TMP will evaluate solutions including new connections and better access to roads, transit, and pathways; additional safe and convenient crossings of physical barriers; planning for investment in public transit, pedestrian, and cycling networks; and high quality streetscape design.

Once complete, the PLLS TMP will recommend a series of transportation projects, initiatives and policies to support the Park Lawn / Lake Shore Area. Some recommended projects will require completion of additional phases in the EA process, including further opportunities for public consultation.

Area Secondary Plans

There are a number of area studies and secondary plans within the vicinity of the Site, including:

- Humber Bay Shores
- Waterfront Reset
- Park Lawn Lake Shore TMP
- Mimico 20/20
- Mimico / Judson
- Humber Trail

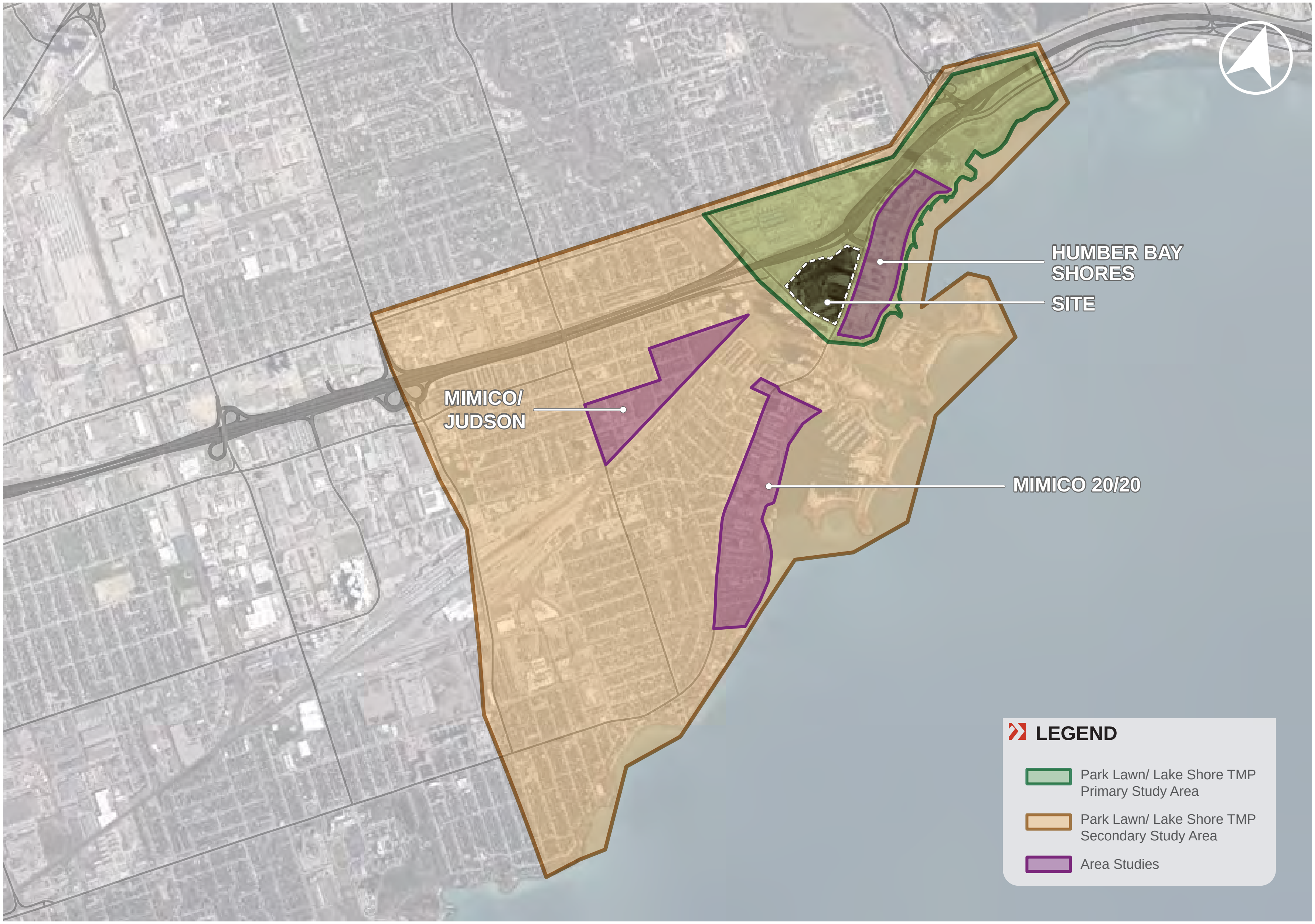


FIGURE 1 PLANNING CONTEXT

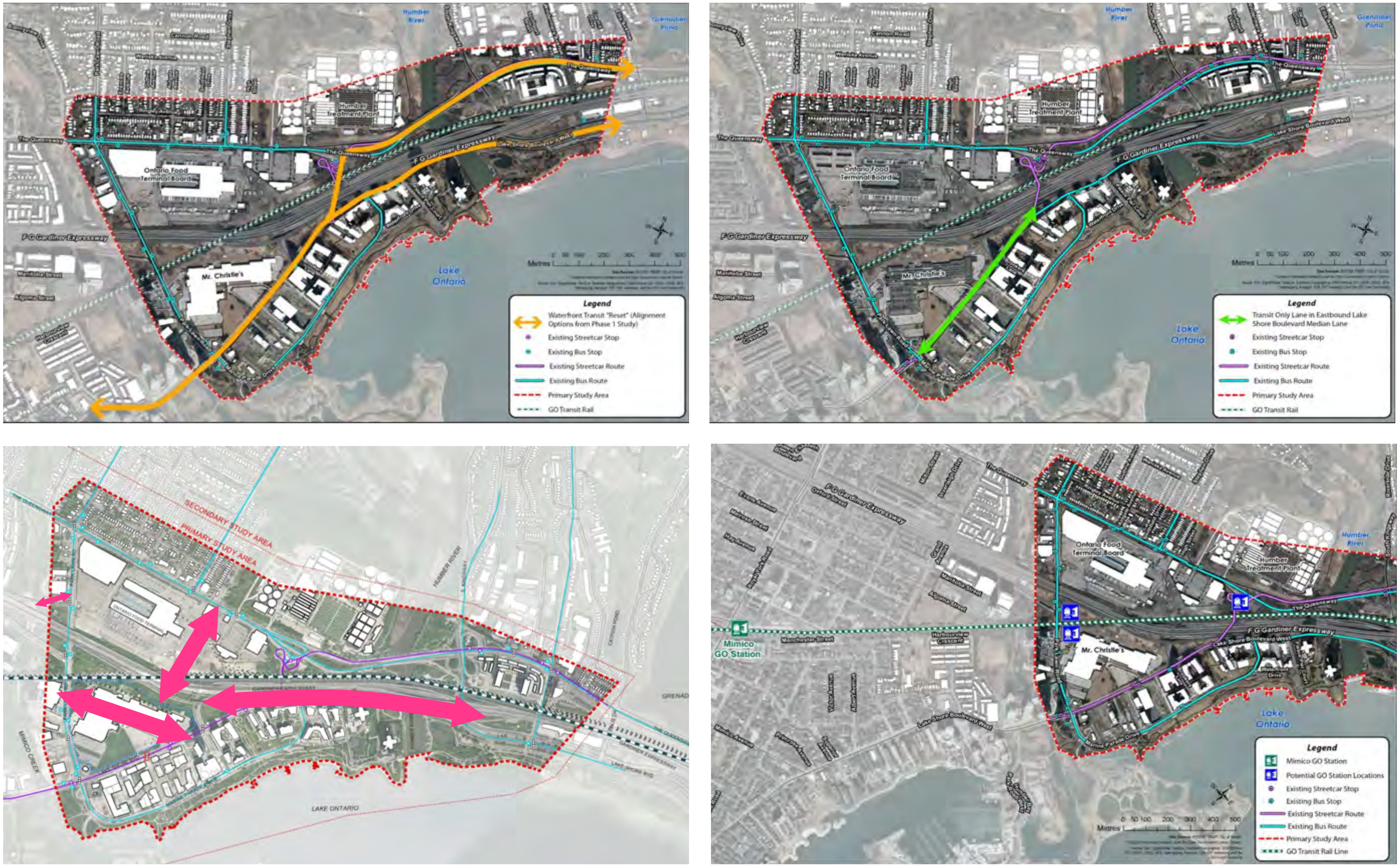


FIGURE 2 PARK LAWN LAKE SHORE TMP

GO Rail / Regional Express Rail (RER)
Metrolinx has been engaged in a review of potential new stations for the rail network in Toronto and the Greater Toronto Area, including reviewing the business case for each location and determining which stations would be included in the next planning horizon. The provision of a new station at Park Lawn was reviewed in 2017 at which time it was not carried forward in the current set of new stations, but was earmarked for a future review. The analysis was revisited in 2018 and Park Lawn Station was included in the set of new stations, based on implementation of the planned 15 minute service on the Lake Shore West line (with electrification), and based on the service being split between the potential Park Lawn Station and the existing Mimico Station to the west.

Waterfront Transit Reset
Toronto's waterfront is undergoing a significant transformation, with rapid growth in many precincts along the water's edge including Mimico, Humber Bay Shores, Liberty Village, Fort York, King / Spadina, City Place, South Core, and King / Parliament. Major growth in several more precincts along the waterfront is either under way or planned. The Waterfront Transit Reset study is being carried out by the City of Toronto to review a number of previous uncoordinated or unbuilt transit initiatives along the Waterfront corridor and determine the optimal routing and technology to support the current and planned waterfront growth. The recommended alternative for the Mimico and Humber Bay Shores area includes a light rail transit (LRT) line along Lake Shore Boulevard that will connect more directly to downtown Toronto to the east, and continue to the City of Toronto border to the west. With respect to the 2150 Lake Shore site, the Waterfront Transit Reset will result in faster, more reliable surface transit travel to and from the downtown, along with a turning loop that is planned to be accommodated on the 2150 Lake Shore Site itself.

FIGURE 3: WATERFRONT TRANSIT RESET

Bicycles and Pedestrians

The City of Toronto recently completed a comprehensive citywide review of the bicycle network, approving the new 10 Year Bike Plan in 2016. For the area around the 2150 Lake Shore Boulevard Site, the Cycling Network 10 Year Plan includes a Major Corridor Study for Lake Shore Boulevard and the construction of a new off-street trail along Mimico Creek west of Park Lawn Road. The proposed improvements are generally intended to improve the network connecting to the existing Martin Goodman Trail running along Toronto's waterfront.

Metrolinx 2041 Regional Transportation Plan

The Metrolinx 2041 Regional Transportation Plan (Metrolinx 2041 RTP) sets out the planned future transportation network for the GTA that best supports intensification in accordance with sustainable transportation objectives. It includes the development of additional rapid transit options for the City of Toronto and the surrounding region, including heavy and light rail, and bus rapid transit options.

Metrolinx Mobility Hub Framework

The Mobility Hub Framework guides the form of development in areas surrounding major transit stations, directing density increases in the region towards land that is within a walking distance of a regional transit hub. While there is currently no mobility hub designation in the Park Lawn / Lake Shore area, the future development of the RER system and Park Lawn station's location at what could evolve into the western gateway to downtown Toronto strongly suggest that the form of development should be planned in accordance with mobility hub principles.

Ontario's Five Year Climate Change Action Plan (2016-2020) includes a policy that there should be a zero minimum parking requirement at mobility hubs, as a means of prioritizing transit use over the use of private automobiles.

2.0 TRANSPORTATION CONTEXT OVERVIEW

The Site is uniquely situated relative to existing major transportation infrastructure in the City of Toronto, bounded by the Gardiner Expressway and Lakeshore West GO railway to the north, Lake Shore Boulevard West to the south, Brookers Lane to the east and Park Lawn Road to the west.

While the Site is currently served by surface transit, primarily relying upon the TTC 501 Queen streetcar, it does not currently have convenient access to the regional GO Transit rail line despite its proximity to the rail corridor. However, the proposed Park Lawn GO Station will provide such access to the GO services and future RER improvements. This will significantly increase transit opportunities to the side and the wider Humber Bay Shores area.

The existing and planned transportation context provide significant opportunity for the proposed development to reshape the urban fabric and mobility networks of the surrounding community. Details of the existing and planned transportation network are provided below.

2.1 STREET NETWORK

Existing Street Context

The Site is adjacent to the Gardiner Expressway and Lake Shore Boulevard West; two major east-west arterials that cross the City of Toronto. Ramps providing access to / from the Gardiner Expressway are to the east and west of the site connecting to Brookers Lane and Park Lawn Road, respectively. Proximity to these corridors afford the Site convenient vehicular access, however, existing capacity constraints result in congestion along the Park Lawn Road and Lake Shore Boulevard West corridors during the weekday peak periods.

While the Site has relatively good east-west connectivity there are limited north-south routes. The Site is constrained by a lack of opportunities to cross the Gardiner Expressway and GO railway lines. Currently, Park Lawn Road is the only north-south connection in the vicinity of the Site and the Humber Bay Shore community. As a result, the Park Lawn Road corridor can become congested during the peak periods due to high demands for movement on and off the Gardiner Expressway, as vehicles by-pass traffic on the expressway.

Within the Humber Bay Shore community there is a limited network of local roads. The Christies Site is large and its development provides an opportunity to significantly change the local road network fabric of the Humber Bay Shore community and create a destination with ample pedestrian and vehicle access via a fine-grain street network.

The existing area street context is illustrated in **Figure 4**.

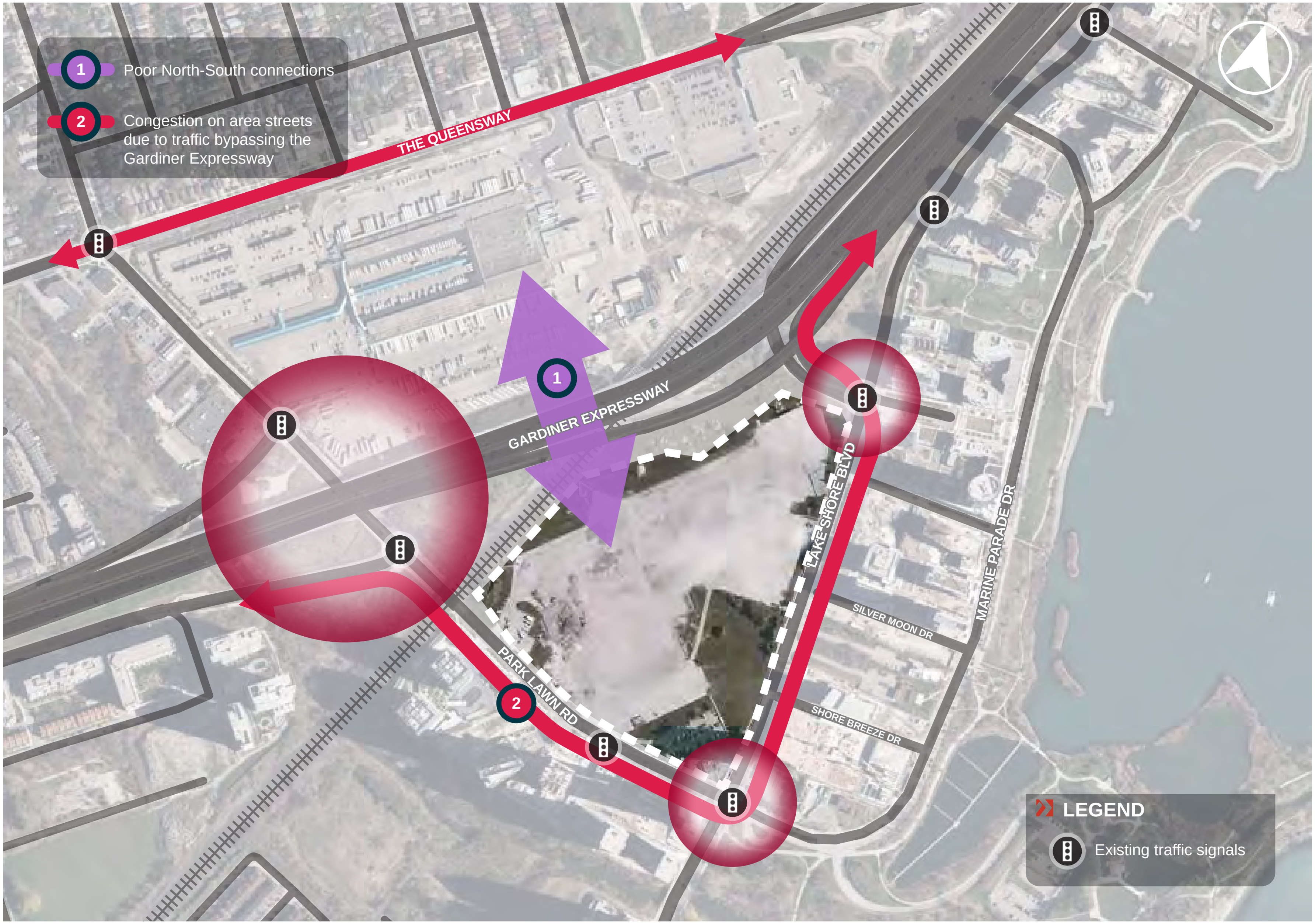


FIGURE 4 EXISTING STREET CONTEXT

Future Street Context

The Christies Site presents significant opportunity and responsibility to provide a development plan that both minimizes the impact of the Site and attempts to resolve or mitigate existing congestion issues.

The development plan proposes several major transportation elements and a comprehensive road network that will not only facilitate trips to and from the Site, but will improve how vehicles move through the Humber Bay Shores area.

A major road network improvement proposed as a part of the project is the delivery of a new east-west arterial that runs across the northern portion of the site (i.e. south of the Gardiner Expressway). This new arterial, the "Relief Road," will serve as the fourth leg of the existing Park Lawn Road / Gardiner Expressway off-ramp intersection and realign the existing on-ramps at the east end of the site on Brookers Lane.

The function of the Relief Road is two-fold; first, it redirects existing traffic that uses Park Lawn Road and Lake Shore Boulevard as a bypass to the Gardiner Expressway, which will in turn relieve congestion on the area road network; and second it provides a strong, consolidated vehicle access point at the north end of the Site.

By relieving this congestion on Park Lawn Road and Lake Shore Boulevard West, it provides the opportunity to re-characterize the existing streets into complete main streets. New cycling and pedestrian facilities can be incorporating into these corridors, while also considering the needs of vehicular traffic.

The Master Plan also introduces an internal street network across the Site, which divides the large Site area into blocks that support the unique Master Plan and integrate the Site with the surrounding Humber Bay Shores community. The proposed new street network will integrate facilities supporting all travel modes including formal transit service, cycling facilities and pedestrian boulevards that link and connect to the surrounding neighbourhood fabric. The new streets are to be true complete streets focusing upon an excellence in the design and composition of the street network to create a vibrant and successful community.

The modified existing and proposed street network is focused on creating a significant level of multi-modal connectivity and interconnection with the bordering main streets and neighbouring communities within Humber Bay Shores.

The future street network is illustrated in **Figure 5**.

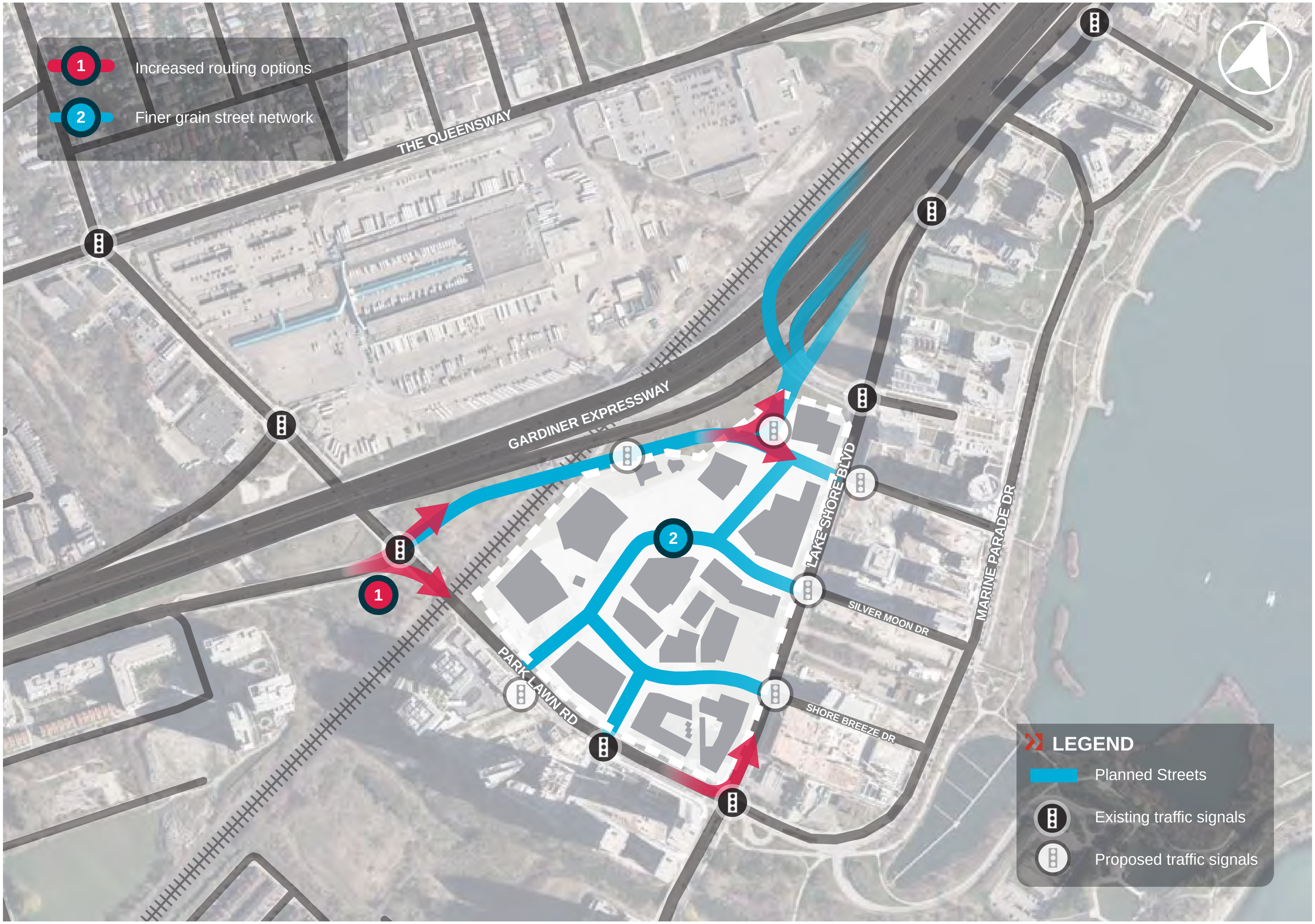


FIGURE 5 FUTURE STREET CONTEXT

2.2 TRANSIT NETWORK OVERVIEW

Existing Transit Context

The Site is well situated relative to existing local surface transit routes. Within close proximity to the Site, local routes operated by the Toronto Transit Commission (TTC) include the 501 Queen Streetcar and surface bus routes. The area primarily relies upon the 501 Queen Streetcar route, which runs along Lake Shore Boulevard West and provides service to Long Branch GO station and downtown Toronto. The surface bus routes offer connections to stations along the Bloor-Danforth subway line (Line 2) and downtown Toronto.

While the Lakeshore West GO rail corridor runs directly to the north of the Site, there are currently no access points to the regional rail line from the area surrounding the Site. Presently, the nearest GO station is Mimico Station, which is approximately 1.5 kilometres to the west of the Site. The station has parking facilities and the 176 Mimico GO bus route provides peak hour service from the Humber Bay Shores area to Mimico Station. The Lakeshore West GO line operates between Union Station and Aldershot with all-day, two-way service.

North of the Gardiner Expressway, the Humber Loop serves as the southern terminus for the 66A Prince Edward bus route and as a short turn loop for the 501 Queen Streetcar. The Humber Loop is approximately 1 km from the Site and the need to cross the Gardiner Expressway creates challenges for pedestrians going to and from the Humber Bay Shore neighbourhood.

The existing context is illustrated in **Figure 7.**

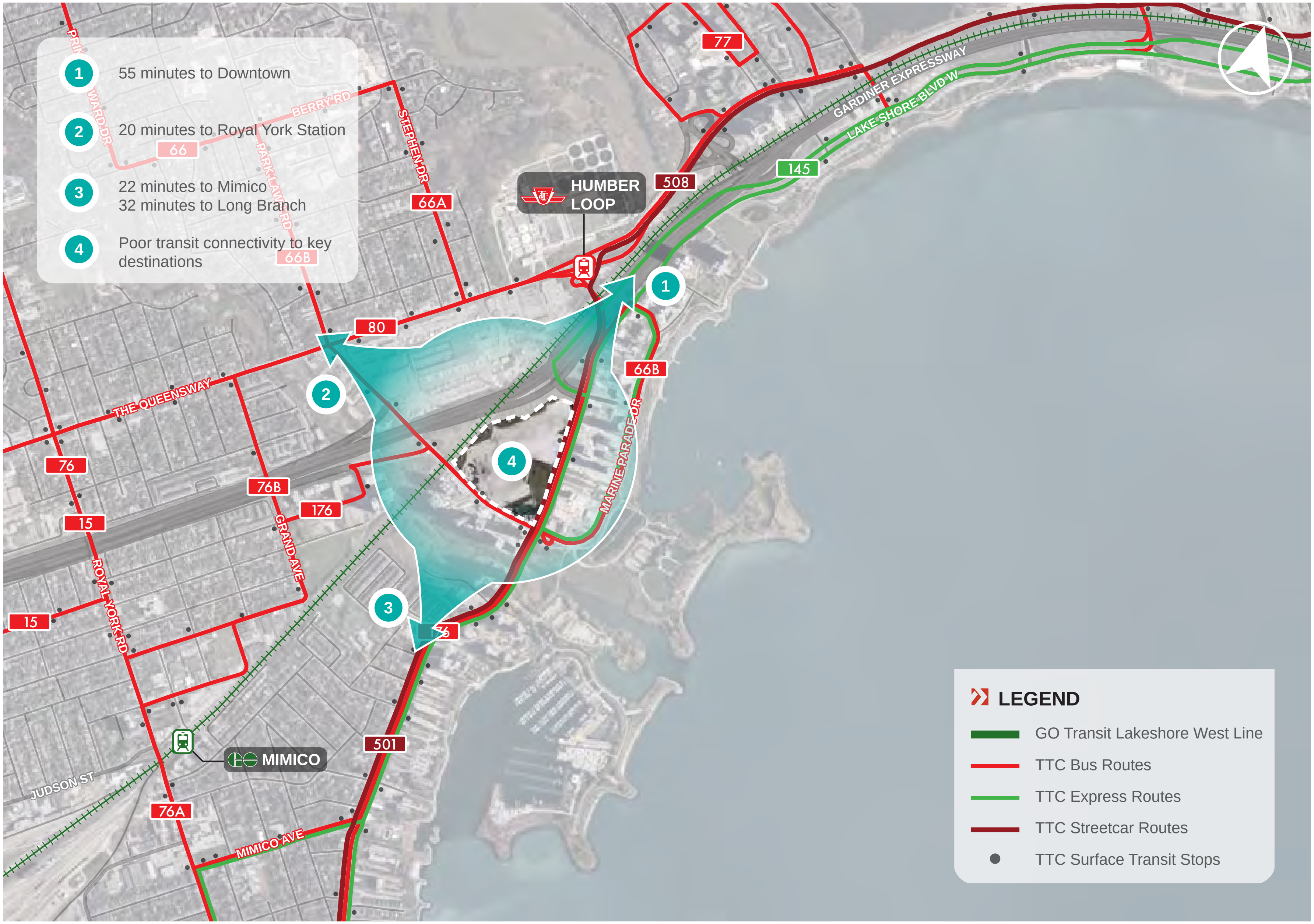


FIGURE 6 EXISTING TRANSIT CONTEXT

Future Network

Significant transit investment is proposed for the Humber Bay Shores area as part of City and Regional transportation plans. The planned improvements, in combination with improvements that are proposed as a part of the Master Plan, will redefine transit access to the west end of Toronto and more specifically the Humber Bay Shore neighbourhood.

Regionally, the GO Regional Express Rail (RER) program will increase service on the Lakeshore West line from a 30-minute frequency to a 15-minute frequency by 2025.

Locally, the City of Toronto has planned improvements along the waterfront transit corridor as part of the Waterfront Transit Reset Initiative. Current plans include a new light rail transit (LRT) route along Lake Shore Boulevard, which would connect the southwestern communities of Toronto to the core of the City.

In support of the investments to transit in the area, the Master Plan includes the delivery of a mobility hub, which will integrate existing local and regional transit, and will increase the area's capacity to accommodate the future transit improvements.

Most significantly, the integrated mobility hub will include a new GO station (Park Lawn GO Station) on the Lakeshore West line. The Park Lawn GO station leverages the Site's proximity to the rail line and provides direct, convenient access for all residential, employment, retail and entertainment destinations in the Humber Bay Shore neighbourhood.

The mobility hub will also replace the existing Humber Loop by providing a new terminus for the existing bus and streetcar routes that are served at the loop. By relocating the routes to the new mobility hub, it will reduce bunching on the otherwise long routes and provide an opportunity to allow a timed stop location for these routes.

The Master Plan road network will be designed to incorporate the changes to the existing bus and streetcar routes, and planned LRT route in order to provide connections to and from the transit hub facility. The re-imagined Lake Shore Boulevard West also provides an opportunity to incorporate the dedicated LRT right-of-way into the corridor.

The integrated mobility hub will provide for convenient and efficient passenger transfers and inter-change between existing and new LRT / streetcar, bus and train services that will converge at the proposed mobility hub.

The future transit network is illustrated in **Figure 7**.

FIGURE 7 FUTURE TRANSIT CONTEXT

2.3 ACTIVE NETWORK OVERVIEW

Existing Network

The Site is well located in proximity to some of Toronto's largest active transportation facilities. Directly south of the Site, the Humber Bay Park East Trail, which is an extension of the Martin Goodman Trail, runs along the shoreline of Lake Ontario. The Martin Goodman Trail is one of the most extensive multi-use trail systems in Toronto. It extends along the waterfront, connecting the west and east ends of Toronto along the water via central Toronto.

There are also a number of active recreation facilities in the area that can be reacted on foot or bike. The Humber Bay Shores Park, the Humber Bay Park East and West Parks, and the Jean Augustine Park, are all located within 750 metres of the Site.

There is currently a Bike Share station just south of the Site on Marine Parade Drive and two other stations within 1 km of the Site. The Bike Share station will allow area residents, employees and visitors to rent bikes on demand to travel to and from the site. There is an opportunity to provide more end of trip facilities, such as Bike Share stations, to encourage cyclists to bike to and from the planned transit hub.

Apart from the multi-use trails, there are limited cycling options in the vicinity of the Site, as the street network is constrained by the Gardiner Expressway and GO Transit line. Similarly to the road network, there are limited cycling connections in the north-south direction.

North of the Gardiner Expressway, there are bicycle sharrows on Park Lawn Road and bicycle lanes on the Queensway, east of Stephen Drive. However, the lack of north-south cycling connections make these routes difficult to reach from the site.

While existing road network provides sidewalks to facilitate pedestrian movement within the surrounding area, the Site itself is a large, impermeable block that lacks connection to its surroundings. It is also important to note that there is a gap in the sidewalk facilities provided along the north side of Lake Shore Boulevard, as no sidewalk is provided on this corridor along the northeast corner of the Site.

Development of the Site provides an opportunity to deliver a fine-grained local street system that integrates the community and creates a block plan supportive of a high quality public and private realm.

The existing active transportation context is illustrated in **Figure 8**.

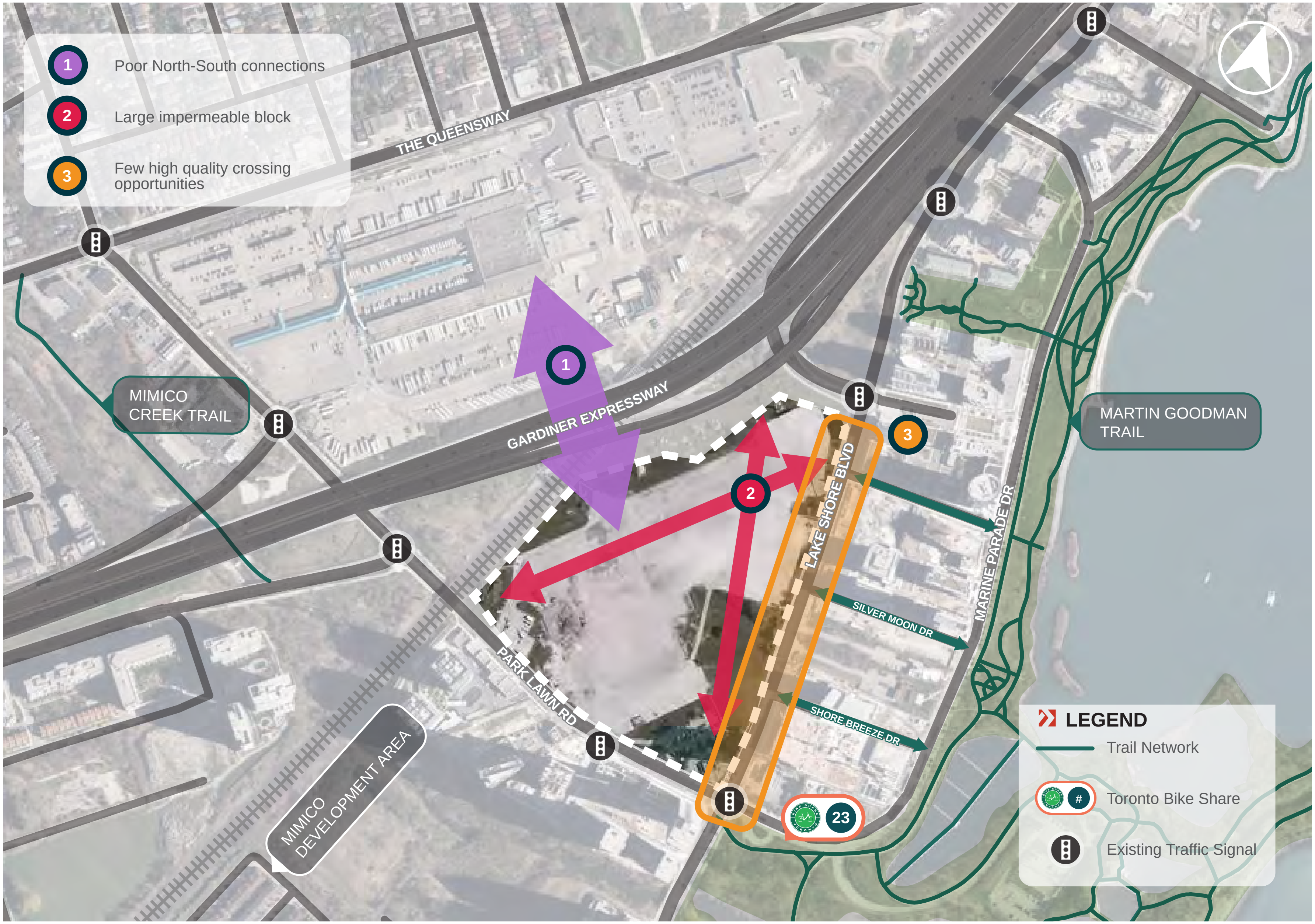


FIGURE 8 EXISTING ACTIVE CONTEXT

Future Network

There are plans for improvements to the active transportation network in the area within the City of Toronto's 2019-2021 Implementation Program. This includes extending the Mimico Creek trail south towards Lake Shore Boulevard. Additionally, the portion of the Humber Bay Park Trail / Martin Goodman Trail within the vicinity of the site is included as part of the renewed program, and will be improved in the next three years.

Within the Master Plan area, a number of active transportation facilities are proposed, as well as improvements to the connectivity and active transportation routes within the wider neighbourhood. The master plan proposes a network of internal streets that will create a fine-grained road network with new mid-block connections, increasing the permeability of the Site.

The proposed internal road network, comprised of public and private roads, will create new cycling and pedestrian connections and crossing opportunities. Furthermore, with the redesign, or "re-imagination," of Lake Shore Boulevard following the creation of the Relief Loop, the Master Plan proposes the addition of on-street cycling facilities along the Lake Shore Boulevard corridor.

A key goal of the Master Plan is to integrate the Site into the surrounding area and link it to existing and future active transportation routes. The links created through the Site will provide residents and patrons of the 2150 Lake Shore Site with access to the surrounding facilities and will provide residents in the Humber Bay Shore neighbourhood with access to the Site. An important link is the multi-modal facilities along the new northern relief road, which provides direct access to the new GO station and mobility hub.

The mobility hub will provide bicycle storage facilities to encourage cycling to and from the station. Long and short term bicycle parking will also be provided throughout the Site at convenient locations relative to the planned development.

Additionally, parking and loading has been consolidated to 4 access points on the perimeter of the Site, which will avoid large concentrations of traffic within the interior of the site and will reduce points of pedestrian / vehicular conflict. Ultimately, the arrangement of vehicular access points will make walking a safe and viable option. This, in combination with the mix of uses on-site, will help to establish walking as the primary travel mode for a significant portions of trips made within the Site and the surrounding area.

The future active transportation context is illustrated in **Figure 9.**

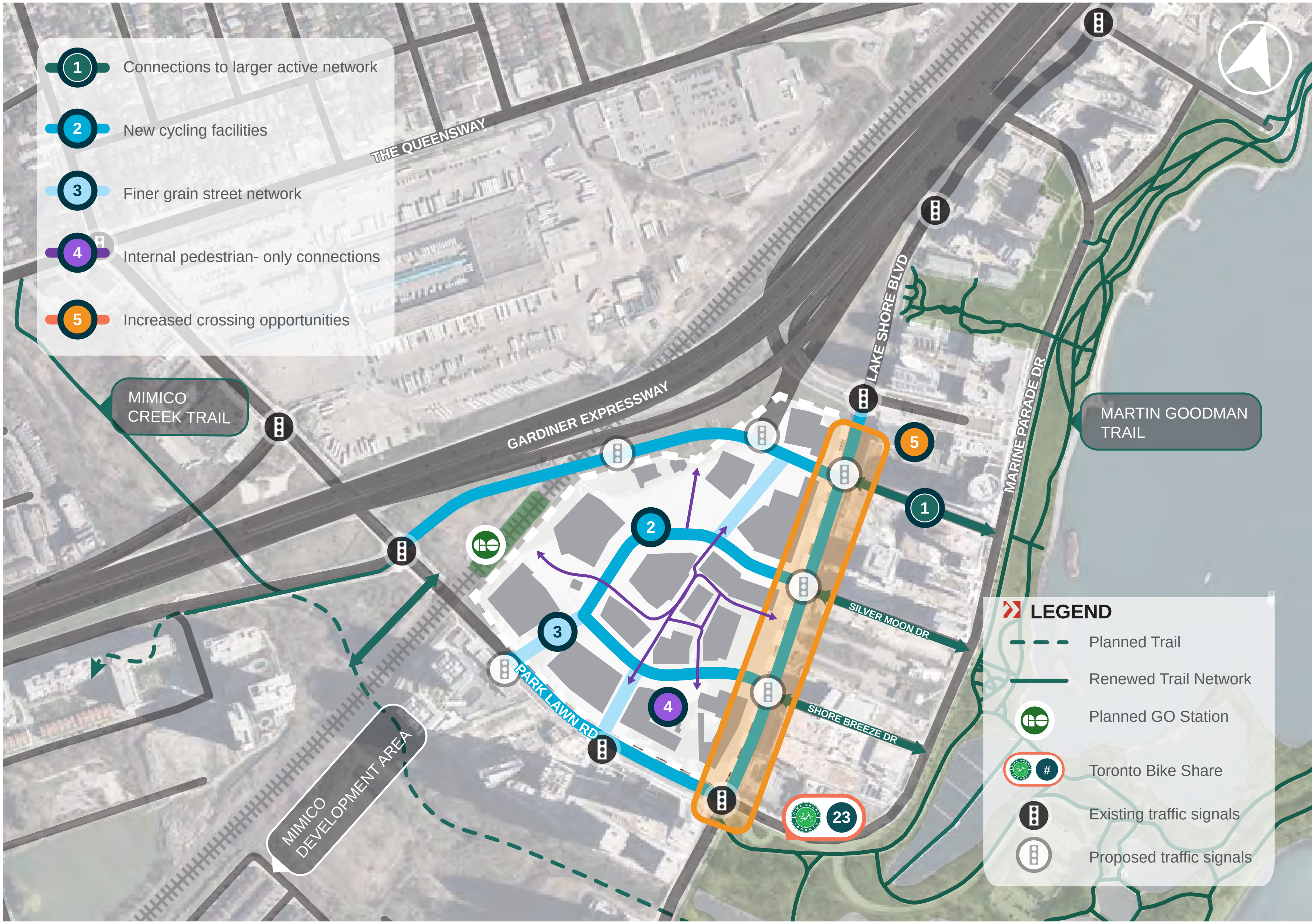


FIGURE 9 FUTURE ACTIVE CONTEXT

3.0 THE MASTER PLAN

A comprehensive Master Plan has been developed for the 2150 Lake Shore Boulevard West property. This development plan provides an overall vision guiding the redevelopment of the property to create a centre for the Humber Bay Shores community that provides for the full range of land uses, facilities, amenities, open spaces, and destinations that sustain successful communities.

From a transportation and mobility perspective, the subject site presents an enormous opportunity to both address current mobility weaknesses and challenges in the area but to transform mobility characteristics in the area of South Etobicoke, Mimico, and Humber Bay Shores.

The Master Plan reflects the guiding mobility vision and responses specifically to the existing area transportation challenges, and fosters the growth of a precinct centred on transit, cycling, and pedestrian travel as the primary travel modes for the site and surrounding neighbourhood. This will help enable the long term area transportation demands and goals of the Master Plan and broader area to be met.

The Master Plan is also focussed upon prioritising the quality of place and the public realm as part of a complete community. A wide range of amenities, destinations, facilities serving the site and the wider Humber Bay Shores area will be located within a short distance. The Master Plan elements will be integrated to support the delivery of a development plan that will foster sustainable travel options as the primary modes of travel for the residents of 2150 Lake Shore Boulevard West and the surrounding neighbourhoods.

The following are the key underpinning elements of the Master Plan from a mobility and transportation perspective:

- Delivery of a new **Transit Hub** that will introduce access to the Metrolinx Lakeshore West GO line and integrate local transit (buses and streetcar / LRT) to reduce auto-mode reliance across a large area of southern Etobicoke and the Humber Bay Shores neighbourhood.
- Delivery of a responsive **Street Network** that provides critical new major street linkages and improvements that will address current challenges and provide for and manage new vehicular activity needs
- Delivery of **Active Infrastructure** which will provide connections between key destinations within and around the site, establishing sustainable travel options as the primary modes for “last mile” trips.
- An **Urban Plan** that is focussed on an creating an excellent public realm network through provision a truly mixed-use community that creates a truly walkable, pedestrian first neighbourhood and through the conscious design and location of functional elements (e.g. servicing / loading and parking components and end-of-trip bicycle facilities); and,
- A **TDM Framework** integrated into the development plan, centred on providing access to sustainable mobility options and influencing travel choice.

Each element is discussed in greater detail in the following sections. The development statistics are summarized **Figure 10.**

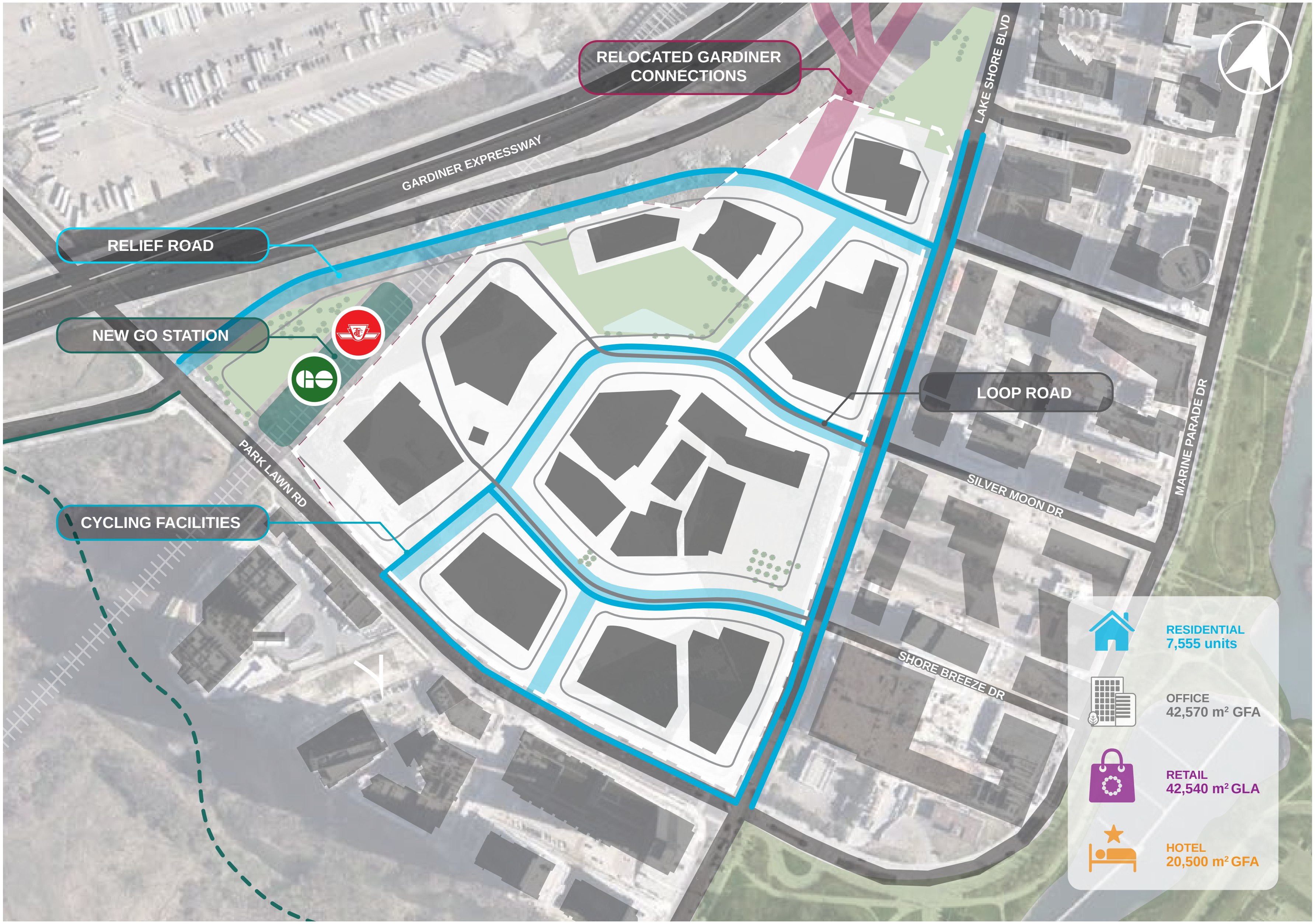


FIGURE 10 MASTER PLAN OVERVIEW

3.1 THE TRANSIT HUB

Further development within the Humber Bay Shores community, and more specifically, the 2150 Lake Shore Boulevard West site, requires an advancement in the level of public transit services offered in the neighbourhood. The introduction of a multi-modal transit hub will be key to providing new non-autocentric travel opportunities to the neighbourhood. The transit hub will serve as a major terminus and / or transfer point for area residents, commuters, visitors of the site, and wider community. In addition to high quality streetcar and bus transfer facilities, strong cycling and pedestrian connections to the station will further help encourage the use of active travel modes to travel from the adjacent neighbourhoods.

The multi-modal transit hub will be oriented around a new Park Lawn GO Station located along the north boundary of the site. This new station will open up travel opportunities to Downtown Toronto along Metrolinx's Lakeshore West GO corridor which is contemplated to offer two-way 30 minute, all day rail service. Travel times to downtown Toronto will be less than 15 minutes, making it a highly attractive travel time in the Toronto context. The relative ease of travelling to / from downtown Toronto and regionally via rail offers large benefits to those living / working / visiting the site.

Modifying existing and adding new surface bus routes, in addition to the relocation of the TTC streetcar Humber Loop to the site may be introduced in response to the emerging transit opportunities in the area. These improved services would provide for a considerable level of transit connectivity and expand the GO station tributary area.

Multiple accesses to the station are proposed to improve connectivity from all parts of the neighbourhood. Access to the station will be provided on both sides of Park Lawn Road, from the Relief Road, and from Station Square within the new 2150 Lake Shore Boulevard West neighbourhood

3.1.1 Key Elements and Objectives

The following provides a high level overview of the key station elements. A "stacked" approach to the multi-modal hub will allow for better integration amongst the different services and takes advantage of the site elevation differences. Each station element is highlighted in **Figure 11**. Further detail will be outlined in the following sections.

Mezzanine (Concourse Level)

To enable passenger circulation through the station, a mezzanine level (±84.00 metres) will provide a "concourse" level to which the streetcar / LRT platforms and GO train platforms (±89.00 metres), and the bus platforms and station pick-up / drop-off (±79.00 metres) can be accessed. Station facilities (e.g. station bicycle parking, ticket vending machines, washrooms, offices, etc…) are contemplated to be located on this level.

Pedestrian Passageway (Teamway)

A pedestrian passageway (similar to the Union Station Bay Street Teamway in downtown Toronto) is contemplated for the underpass along the Relief Road. A weather protected underpass connection will provide waiting space for bus passengers as well as provide a direct connection to the concourse level for general station circulation. Connections to the rail station platforms may also be contemplated. This inviting passageway will help bridge a connection to the station facilities for pedestrians approaching from both sides of the rail underpass on the Relief Road.

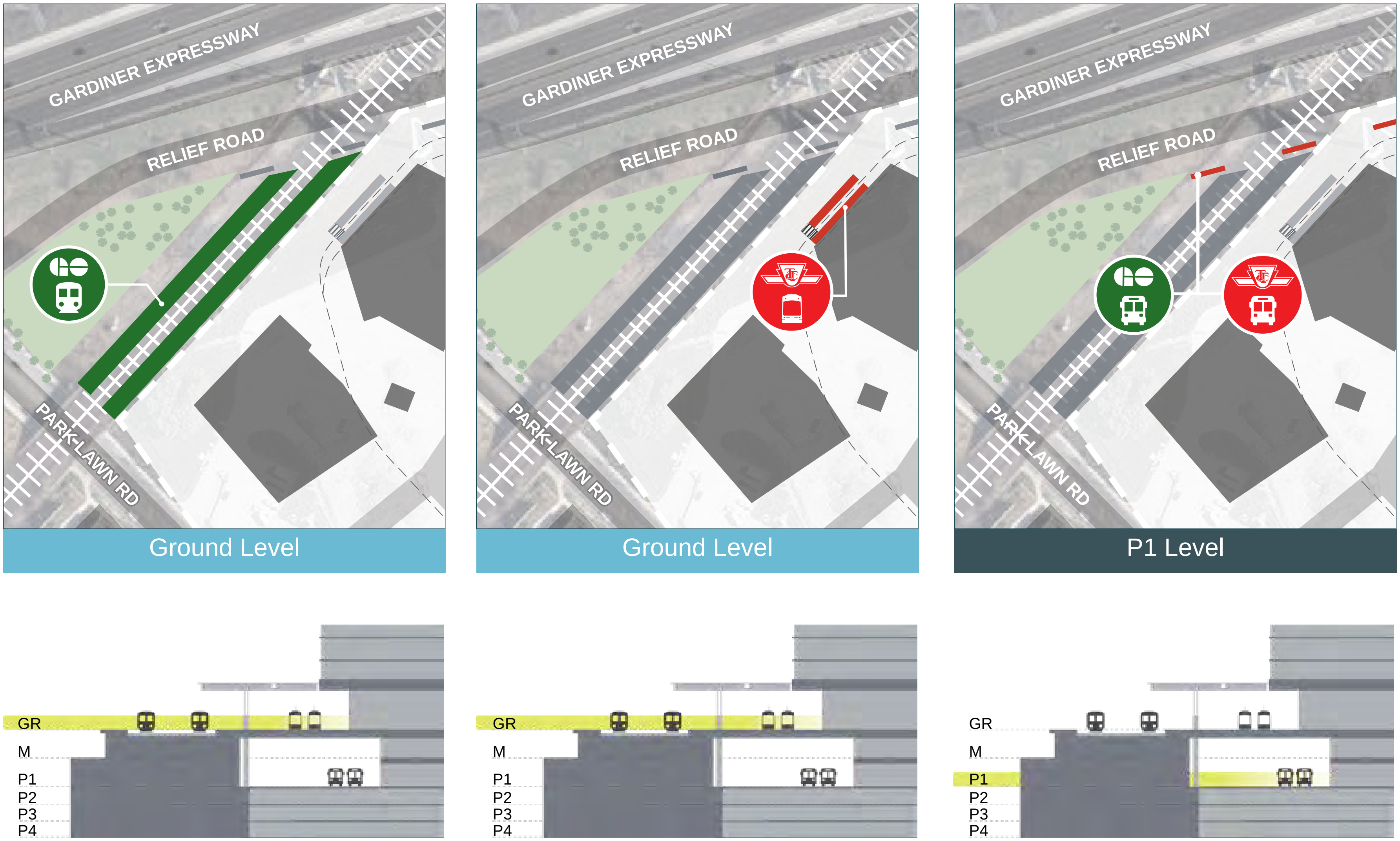


FIGURE 11A THE TRANSIT HUB

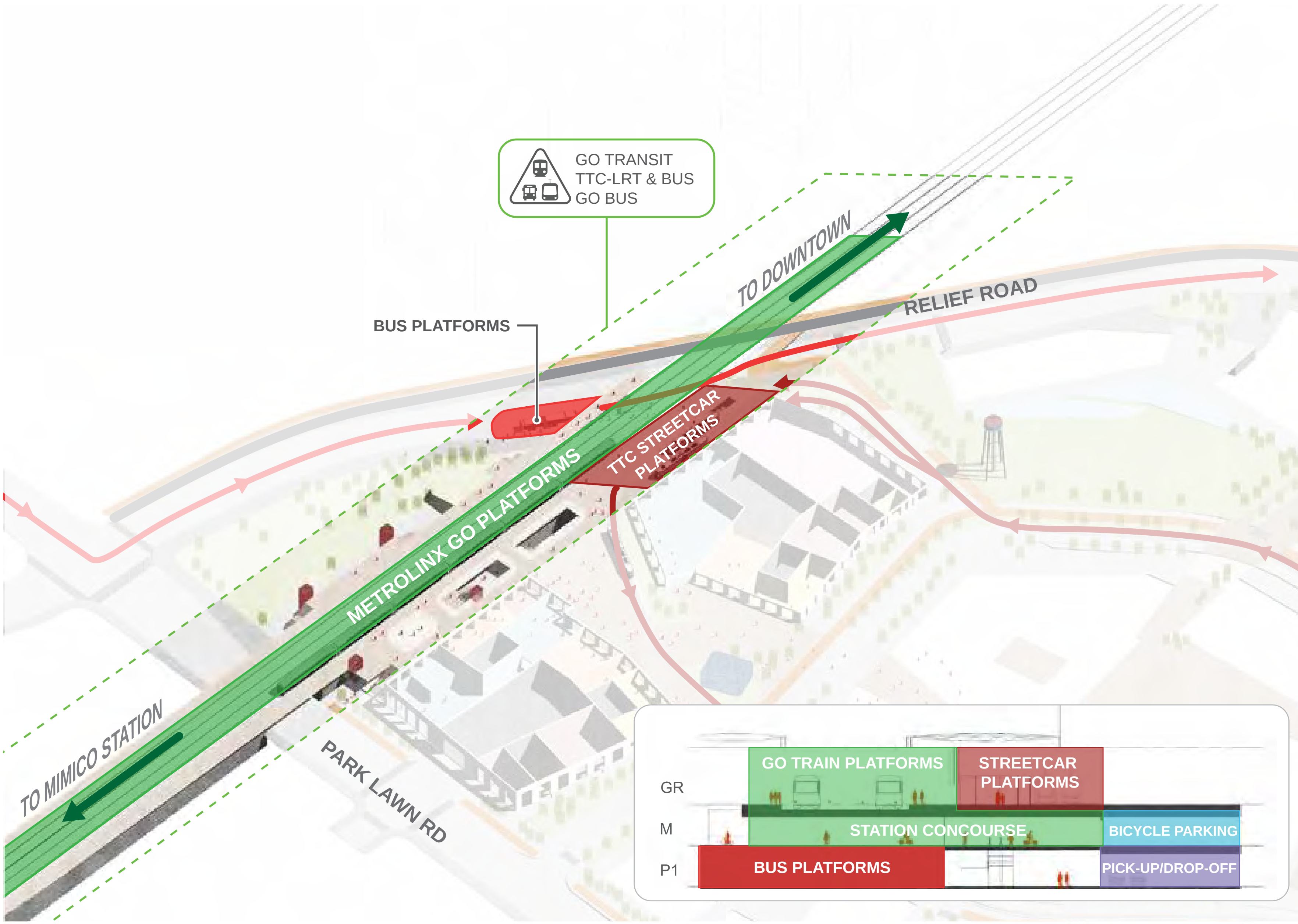


FIGURE 11B THE TRANSIT HUB

3.1.2 Metrolinx GO Train Considerations

BA Group estimates in the order of 4,000 two-way weekday peak hour GO train boardings at a new Park Lawn GO station will be made upon full build out of the subject site.

First Capital Realty have been working with Metrolinx to advance the development of a new Park Lawn GO station. This work has been extensive and has involved an update to the Initial Business Case (IBC) for the station and advancement of the next stages of design / approval necessary to bring the station to realisation.

Platform Location

Metrolinx GO Station platforms (4.9 metres wide and 315 metres in length) will span over Park Lawn Road and extend west to Mimico Creek. Studies will be undertaken as part of the ongoing design development process to evaluate he feasibility of relocating the existing signal bridge currently situated directly north of the Site to maintain sufficient sightlines to the lights and structure for safety.

These platforms will be located on either side of the existing four-track Lakeshore West rail corridor and will be at the existing rail corridor elevation (±89.00 metres). Eastbound trains will stop at the south platform, while westbound trains will stop at the north platform. Bypassing rail traffic will have the option to use the centre tracks. The rail bridge over Park Lawn Road will be widened to accommodate the new platform north of the tracks.

A canopy on a portion of the rail platform will be developed as part of the design development process and under coordination with Metrolinx and other relevant stakeholders.

Access & Connections to GO Train

Pedestrian access to the GO platforms will be provided at the mezzanine level (±84.00 metres) through a pedestrian tunnel approximately 5.0 metres beneath the rail corridor. A series of stairs and elevators will provide the vertical circulation elements to the two rail platforms.

Access to the mezzanine level (main station concourse level) is provided primarily from Station Square. A pedestrian entrance from Park Lawn Road, as well as entrances from the Relief Road and “Teamway” (±79.00 metres) are also contemplated as part of the plan.

Secondary entrances to the GO station platforms on the west side of Park Lawn Road are currently being contemplated to improve accessibility from developments on the west side of Park Lawn Road.

Figure 12 illustrates the pedestrian access and location of the GO platforms in relation to the site.

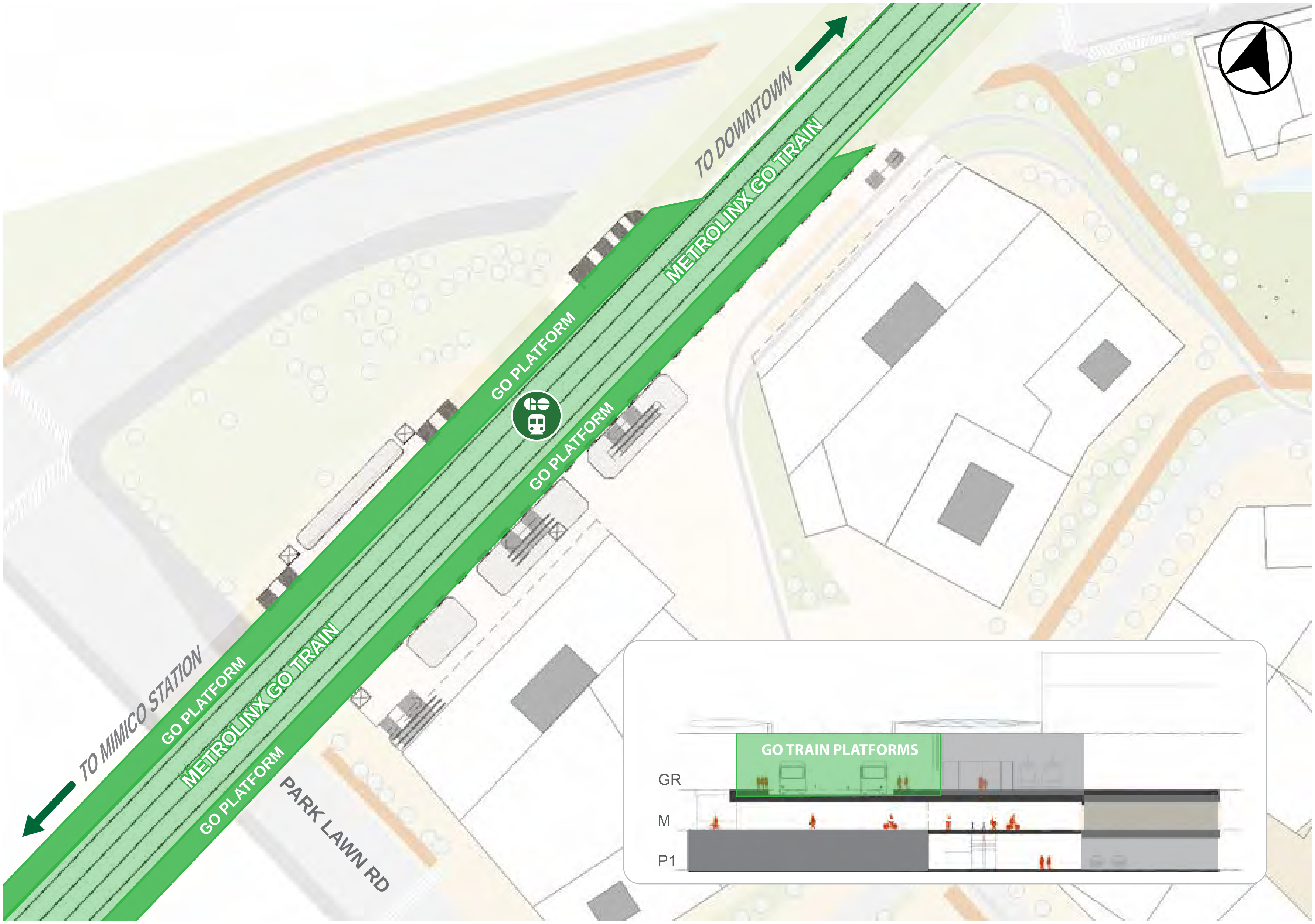


FIGURE 12A GO TRAIN DESIGN / CONSIDERATIONS - PLATFORM LEVEL

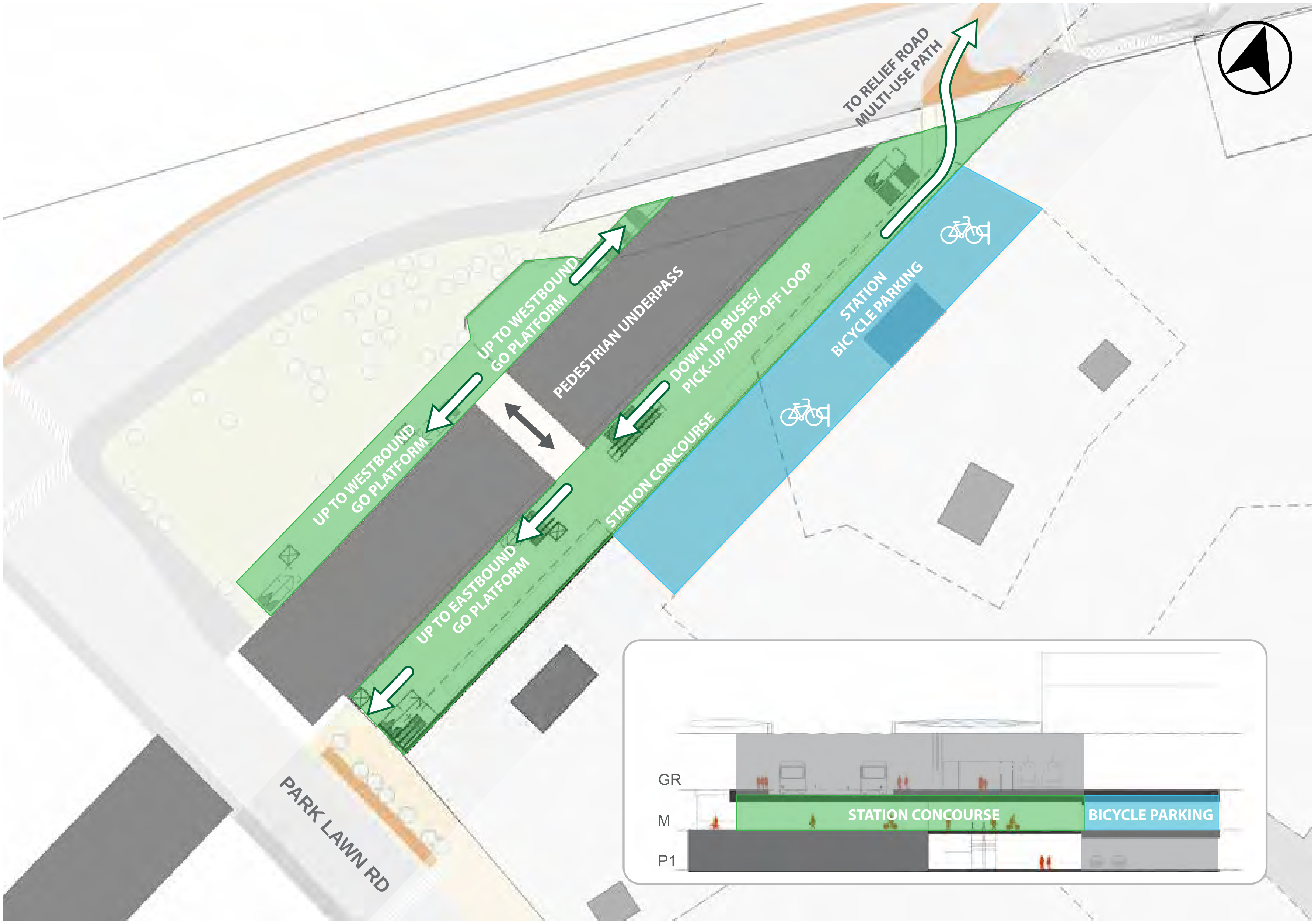


FIGURE 12B GO TRAIN DESIGN / CONSIDERATIONS - MEZZANINE / CONCOURSE

3.1.3 Streetcar / LRT Considerations

The existing 501 Queen streetcar service (future Waterfront West LRT) will be improved and will route to / from the future multi-modal transit hub facility through the 2150 Lake Shore Boulevard West site to provide the desired connectivity and integration with the rail and bus services. A terminal facility for the streetcar at the new transit hub will provide for a new terminus for the route and offer the opportunity for a westbound (to Long Branch) and eastbound (to downtown Toronto and beyond) service. This new station will replace the existing Humber Loop and provide a new terminus that will facilitate the bisection of the 501 route and help reduce bunching on an otherwise long route, and give the TTC the opportunity to provide a timed stop location.

The streetcar / LRT facility along Lake Shore Boulevard would be enhanced as per current City plans to have a dedicated right-of-way through the Humber Bay Shores area to maximise efficiency and service potential. Prioritising transit in order to provide frequent and reliable streetcar services will improve the desirability of transit as a primary mode of choice for residents in the neighbourhood.

Terminal Platform Locations

Two (2) 30 metre long streetcar platforms (in parallel orientation) are proposed at street level (±89.00 metres) to provide for separate waiting areas for two streetcar / LRT services, potentially with different headways. The parallel configuration of these platforms would be in a similar configuration as the existing streetcar platforms located at Broadview Station and Dundas West Station. They are located directly adjacent to the eastbound Metrolinx GO platforms to provide ease of access to / from the GO station and bus terminal and minimise transfer time and distance. The platform locations are shown in **Figure 13.**

Access to Streetcar Platforms

Access to the streetcar platforms (±89.00 metres) are provided primarily via the Station Square. Vertical circulation elements, which provide connections to the mezzanine (concourse) level will be located within close proximity to the station platforms.

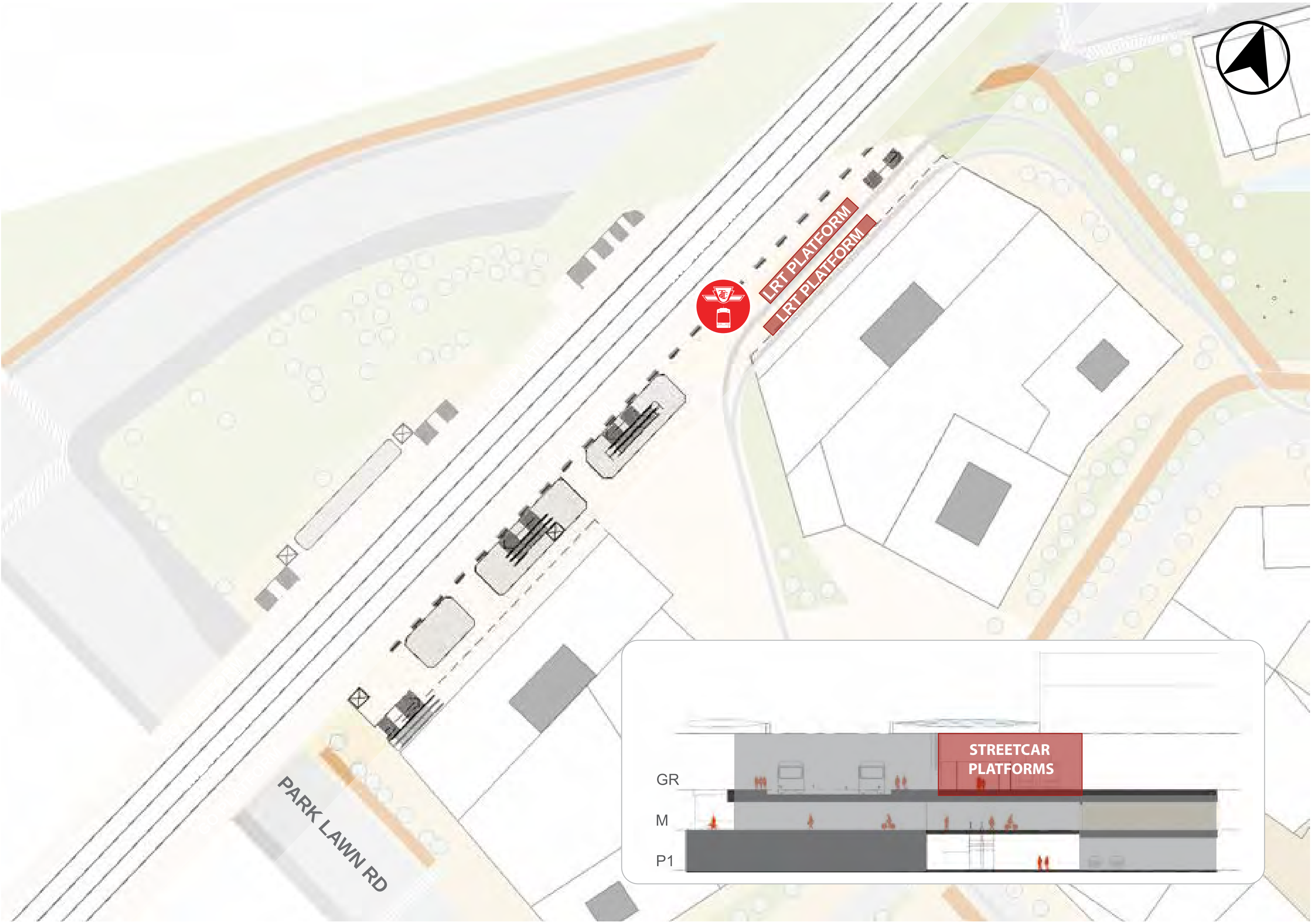


FIGURE 13 LRT TRAIN DESIGN / CONSIDERATIONS

3.1.4 Bus Considerations

There is a substantial opportunity to add new and modify existing area surface bus routes to capitalise on the higher order transit being afforded by the new Park Lawn GO station. These new routes can better serve the 60,000 plus future residents of southern Etobicoke living within a convenient transit trip watershed of the station.

The existing TTC Prince Edward (Route 66), Swansea (Route 77), and Queensway (Route 80) bus services are all candidates for Park Lawn GO Station tributary bus routes. Other possible new local routes may be introduced to better serve the Humber Bay Shores and / or Mimico neighbourhoods. These improved services would provide a considerable level of transit connectivity and significantly expand the GO station tributary area. Additional GO bus services could be introduced at the new transit station to provide a range of regional services to, for example, Toronto Pearson International Airport and other key destinations.

Termination of local and regional bus services at the new station allows for the opportunity to provide timed stops – coordinated with arriving / departing GO trains. The service schedules and frequencies of various bus routes may be complementary, allowing the sharing of bus platforms between different lines.

Integration of the bus services within the multi-modal transit terminal facility will help facilitate seamless connections between the different services (i.e. streetcar / LRT and rail).

Bus Platform Locations
Three (3) layby-style bus stops are proposed along the south side of the Relief Road (±79.00 metres) at spacings to allow independent operation of each platform. These stops would be located directly beneath the rail corridor, and direct connections to the station concourse can be provided as shown in **Figure 15.** The immediate adjacency to the road and can allow transit vehicles to easy continue on their route without having to enter a station facility.

Access to Bus Platforms
The bus platforms located at the basement level (±79.00 metres) will be directly adjacent to the "teamway", which provides a weather protected waiting area for passengers, as well as direct connections to the mezzanine station concourse level (±84.00 metres) for general circulation. Access to the "teamway" is also provided from the sidewalk facilities along the Relief Road.

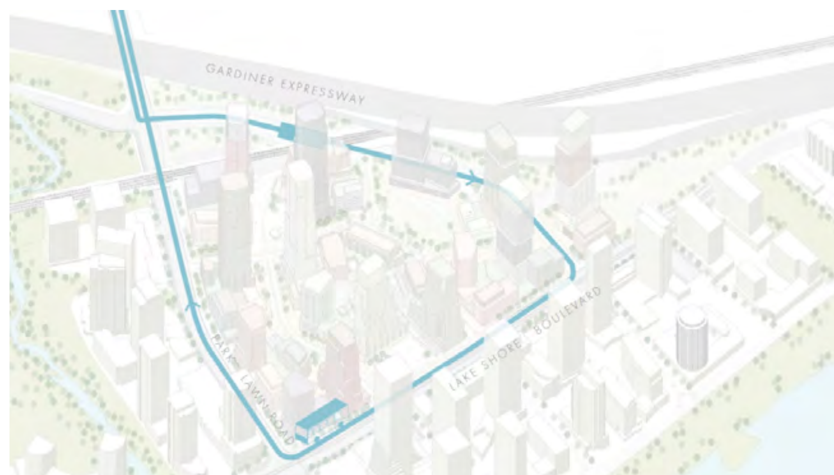


FIGURE 14: POTENTIAL BUS ROUTING AROUND SITE

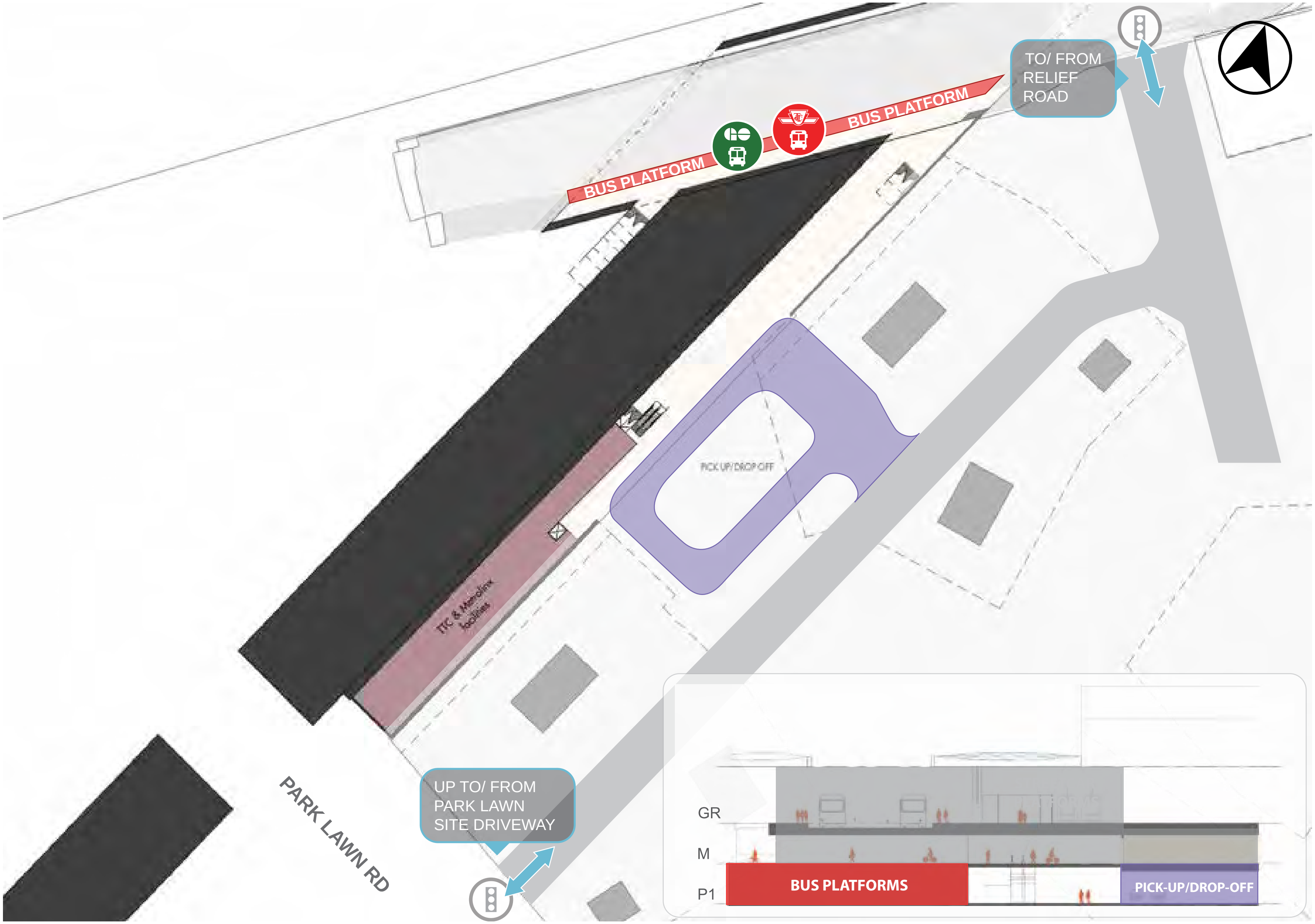


FIGURE 15 BUS DESIGN / CONSIDERATIONS

3.2 THE ROAD NETWORK

The site has the unique opportunity to deliver a series of new transportation connections and infrastructure to expand the existing street network given the size and prominence of the Site within the wider Humber Bay Shores neighbourhood. The redevelopment of the plan can provide additional connectivity and redundancy for vehicles, cyclists, and pedestrian to travel between Lake Shore Boulevard and Park Lawn Road.

3.2.1 Key Elements and Objectives

Key objectives considered during the development of the proposed street plan are summarised below:

Build Network Redundancy
Vehicles currently have one route to travel between the Park Lawn Gardiner Expressway ramp terminals and Lake Shore Boulevard. This creates a large amount of pressure on the Park Lawn / Lake Shore Boulevard signalized intersection. A new road network will provide additional connections and network redundancy between Park Lawn Road and Lake Shore Boulevard West.

Consider All Road Users
Enhancements and additions to the street network – both within and adjacent to the site will support the movement for all users and be designed in a way that minimise road conflicts and encourages physical activity.

Re-characterise Adjacent Streets
Lake Shore Boulevard and Park Lawn Road currently handle a large amount of commuter traffic. They are to be reimagined as “main streets” which can also function as public realm spaces, and leisure spaces in addition to being multi-modal transportation corridors. These streets should provide for more local and destination oriented traffic at speeds that will improve pedestrian and cyclist safety.

Support Access Needs to / from 2150 Lake Shore Boulevard W.
The new network of streets should facilitate easy connections from the site to / from the wider road network and the Gardiner Expressway on / off ramps. These new proposed streets will support pedestrian and cycling permeability through the site.

3.2.2 Proposed Road Plan

The proposed Master Plan creates a new network of public streets which will improve network connectivity for all users (including cyclists, pedestrians and vehicles), and will provide primary access to the site. Changes to existing adjacent street network are proposed as part of the Master Plan to improve transit, cycling, and pedestrian facilities.

These modifications to existing roads and new road infrastructure are listed below and discussed further in this section:

- New Relief Road (North Collector Road)
- New Lake Shore Boulevard Ramp Terminal realignment
- Existing Lake Shore Boulevard West
- Existing Park Lawn Road
- Existing Queensway
- New Internal Street network.

These are illustrated generally in **Figure 16.** A functional road plan is provided in **Appendix I.**

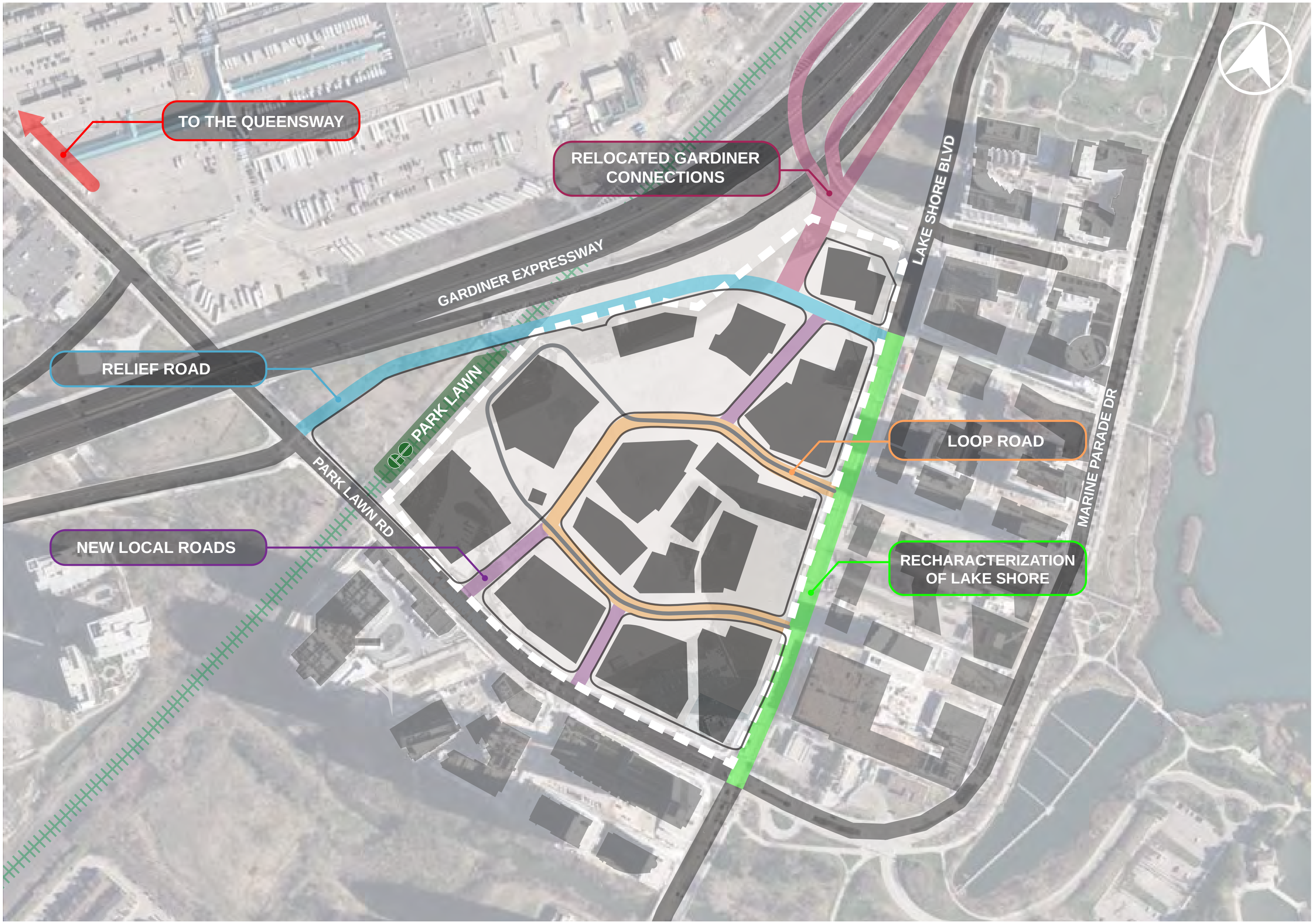


FIGURE 16 THE ROAD NETWORK

3.2.1 Relief Road

The Relief Road runs generally in a northwest-southeast direction between the Gardiner Expressway off-ramp at Park Lawn Road to Lake Shore Boulevard West / Marginal Boulevard along the northern edge of the site property, adjacent to the Gardiner Expressway as illustrated in **Figure 17.**

The Relief Road will form a new fourth leg to the existing Park Lawn Road / Gardiner off-ramp signalized intersection. At the other end, a new signalised intersection is proposed at Lake Shore Boulevard West / The Marginal Road / Relief Road. A shallow gradient (3-5%) is proposed to allow the road to cross the rail corridor with sufficient vertical clearance for vehicles (min 5.0 metres) and structure allowances. The road will have a basic four-lane cross section (e.g. two lanes in each direction) with a 3.0m wide bus stop layby provided on the south side beneath the Metrolinx rail corridor in the underpass. The proposed right-of-way is 26.0 metres.

There are four (4) new intersections on the Relief Road. A three-legged signalised intersection approximately 280 metres east of the Park Lawn Road intersection will provide for signalised all-moves driveway access into the vehicular areas within the basement. A second STOP controlled right-in / right-out intersection is provided approximately 120 metres east of the signalised site driveway to provide secondary access into the underground loading / parking areas. A signalised three-legged intersection with the new relocated Gardiner on / off ramps is located approximately 110 metres west of the Lake Shore Boulevard and 170 metres east of the signalised site driveway. Finally, a fourth unsignalised, STOP controlled right-in / right-out site driveway (Private Street 'B') is proposed approximately 40 metres east of the new signalised Gardiner ramp terminal access intersection.

The current Relief Road alignment does not connect to Brookers Lane in order to maintain appropriate design geometry (sufficient deceleration and stopping sight distance to traffic control signals) for the new Gardiner Expressway on / off ramps.

3.2.1.1 Multi-Modal Considerations

The Relief Road is proposed with minimum 3.0 metre sidewalks along the south side of the street, adjacent to the development. The sidewalk along this corridor will connect to the proposed Park Lawn GO station building and proposed "teamway". A 3.0 metre width multi-use path will be located on the north side of the road adjacent to the Gardiner Expressway and is further discussed in **Section 3.3.1.1.**

3.2.1.2 Relief Road Considerations

Relieves Area Traffic Congestion

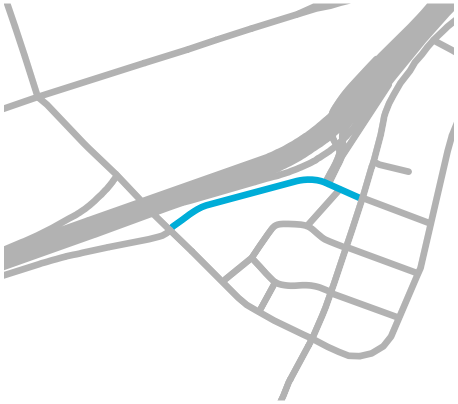
The Relief Road provides a second crossing of the Metrolinx rail corridor, and offers an alternative to the Park Lawn Road / Lake Shore Boulevard intersection when travelling between the westbound Gardiner off-ramp and the Humber Bay Shores community, relieving pressure of the existing Park Lawn Road / Lake Shore Boulevard signalised intersection.

Provides Site Access

The new road also leverages the adjacency to the Gardiner Expressway, and required elevation changes to provide direct connections from the site's underground parking and loading entrances to / from both the eastbound and westbound expressway ramp terminals, minimising vehicular and truck traffic on adjacent roads such as Lake Shore Boulevard and Park Lawn Road. This in turn, lowers the amount of through traffic on these "main streets", allowing for the character of those streets to be redefined.

Support Access Needs to / from the Transport Hub

Finally, the Relief Road capitalises on the adjacency to the Park Lawn GO station and alignment to provide immediate access to the multi-modal transportation hub for surface transit routes (e.g. buses). Bus laybys are to be located on the south side of the Relief Road.



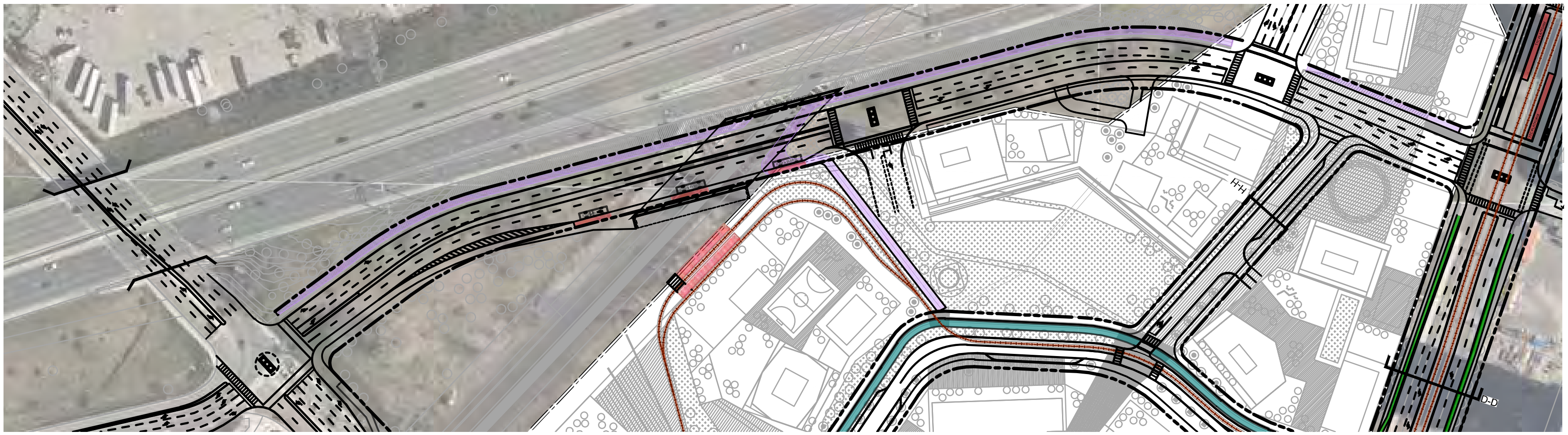


FIGURE 17   RELIEF ROAD DESIGN / CONSIDERATIONS

3.2.2 Gardiner Ramps Relocation

3.2.2.1 Gardiner Ramps (East)

Highway ramp modifications are proposed for the eastbound Lake Shore Boulevard and Gardiner Expressway on-ramp and Gardiner Expressway off-ramp to improve connectivity to the proposed Relief Road and basement site accesses. In addition, the realignment of these ramps opens up the area currently occupied by the footprint of the existing ramp terminal for future development / new land uses. The existing on / off ramp that currently intersects with Brooker's Lane will be relocated to a new signalised intersection on the Relief Road approximately 110 metres west of the Lake Shore Boulevard / Relief Road intersection.

The location of this intersection is driven by road geometric constraints for the on / off ramps onto the Gardiner Expressway. A suitable geometric design was developed based on a 60 km/h design speed for highway ramps. The design of these ramps requires the embankment in front of the west abutment of the eastbound Gardiner Expressway off-ramp to eastbound Lake Shore Boulevard to be reconfigured in order to meet design speed requirements. This alignment minimises alterations to the tunnel section, abutments, piers, and decks of the Gardiner Expressway to avoid high costs and construction impacts to the highway. The location of this proposed intersection also provides for adequate sightlines (stopping sight distance) to the future signal heads.

A signalised three-legged intersection is proposed where the ramp terminal meets the Relief Road. A right-turn lane and dual-left turn lanes are proposed for the Gardiner Expressway off-ramp, while two receiving lanes are proposed. These lanes will eventually split into an eastbound Gardiner on-ramp and an eastbound Lake Shore Boulevard on-ramp.

3.2.2.2 Gardiner Ramps (West)

Minor modifications are recommended at the westbound Gardiner Expressway on-ramp off Park Lawn Road to widen the on-ramp to achieve an additional receiving lane. This is proposed in conjunction with the dual northbound left-turn lane on Park Lawn Road and dual southbound right-turn lane on Park Lawn Road.

The lane configuration at the eastbound Gardiner Expressway off-ramps at Park Lawn Road will be modified to accommodate a through lane to the Relief Road. The existing eastbound dual-left turn lanes and right-turn lane will be maintained. Removal of the eastbound right-turn slip lane is proposed to improve pedestrian crossing safety at the intersection. Replacing the slip-lane with reduced curb radii will reduce the crossing distance for pedestrians, minimising conflicts between vehicles, pedestrians, and cyclists, and will slow vehicles making right-turns.

The widening and taper of the off-ramps begins approximately 120 metres west of the signalised intersection and does not suggest modifications to the Mimico Creek crossing. Further understanding and a more wholesome design review will be undertaken as part of the ongoing design development process.

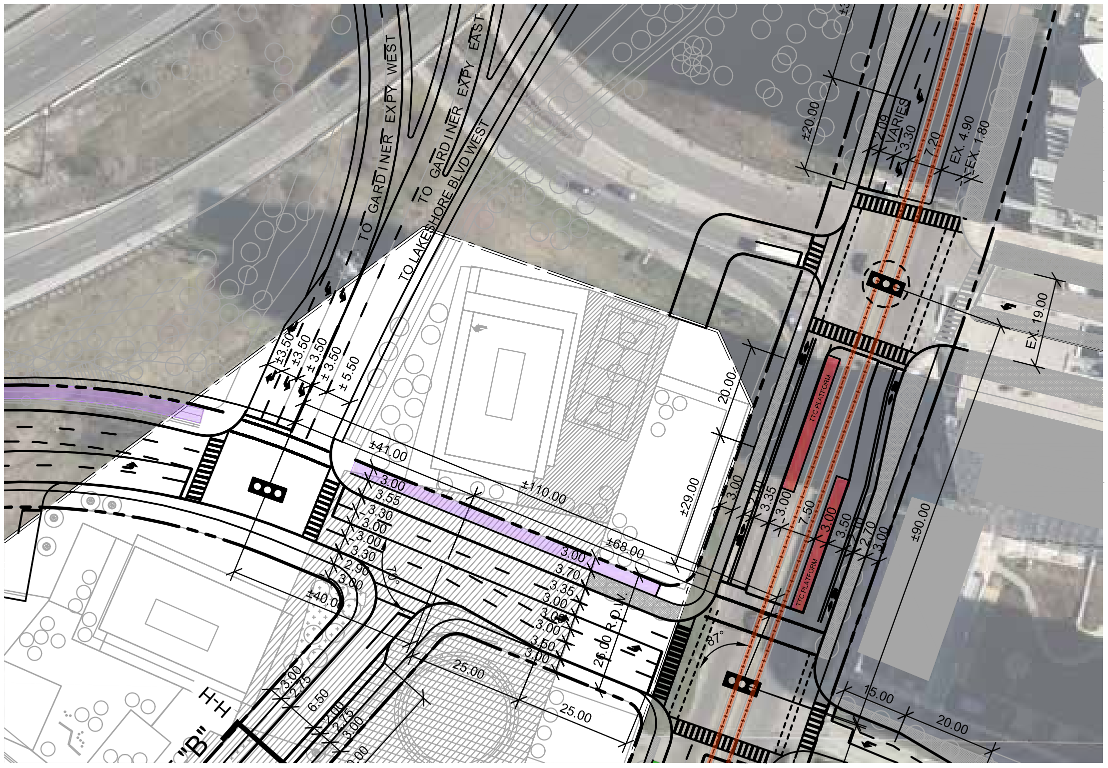


FIGURE 18 GARDINER RAMP RELOCATION DESIGN / CONSIDERATIONS

3.2.3 Lake Shore Boulevard West

Lake Shore Boulevard West is classified as a major arterial street designed as an Avenue with a 36.0 metre right-of-way (ROW) on the Official Plan to accommodate for a separate transit right-of-way. A widening of approximately 3 metres (from 33 metres), taken from the 2150 Lake Shore Boulevard property will fulfill the Official Plan.

Intersections

A series of new signalised intersections are proposed at all the planned / existing local Humber Bay Shores street intersections between Brooker's Lane and Park Lawn Road. The regularity of these signalised intersections (approximately 140 metres apart each) will provide frequent controlled pedestrian / cycling crossings, improving pedestrian safety and permeability across Lake Shore Boulevard.

Transit

A fully separated transit right-of-way (minimum width 7.0 metres) adjacent to the site will be provided between Shore Breeze Drive and Brooker's Lane. The streetcar will continue to run in mixed-traffic east of Brooker's Lane and west of Shore Breeze Drive.

Cross-Section

Lake Shore Boulevard will provide two (2) vehicular lanes in each direction with streetcar transit running in centre median. The following turning lanes were incorporated into the design:

- eastbound left-turn lane (EBLTL) at Shore Breeze Drive / new public loop road
- westbound left-turn lane (WBLTL) at Silver Moon Drive / new public loop road
- westbound left-turn lane at Brooker's Lane;
- eastbound left-turn lane (EBLTL) and westbound right-turn lane (WBRTL) at Park Lawn Road / Lake Shore Boulevard West

3.2.3.1 Multi-Modal Considerations

An off-street boulevard (raised) cycle track (minimum 1.8 metres wide with a 0.6 metre buffer to the roadway) has been incorporated into the design of Lake Shore Boulevard West. The facility provides for a perceived higher level of safety and comfort for cyclists on the boulevard, separated from vehicle traffic. In addition, it keeps motorists from easily entering the cycling facility and helps visually reduce the width of the street. The facility is further discussed in **Section 3.3.1.1.**

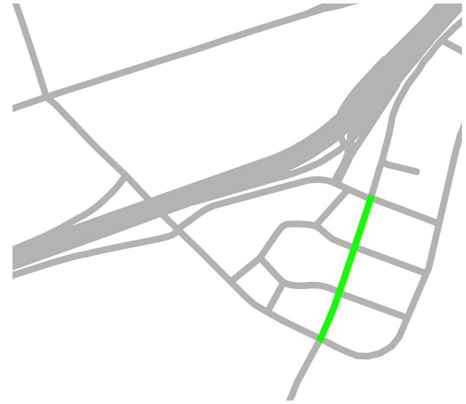
3.2.3.2 Lake Shore Boulevard West Considerations

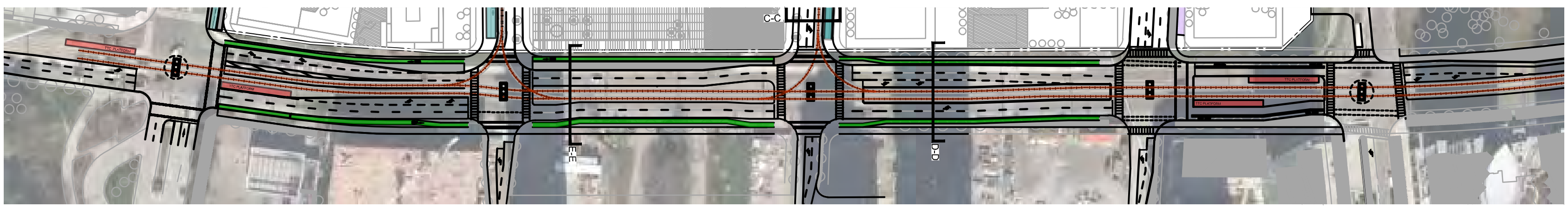
Lake Shore Boulevard as a "Main Street"

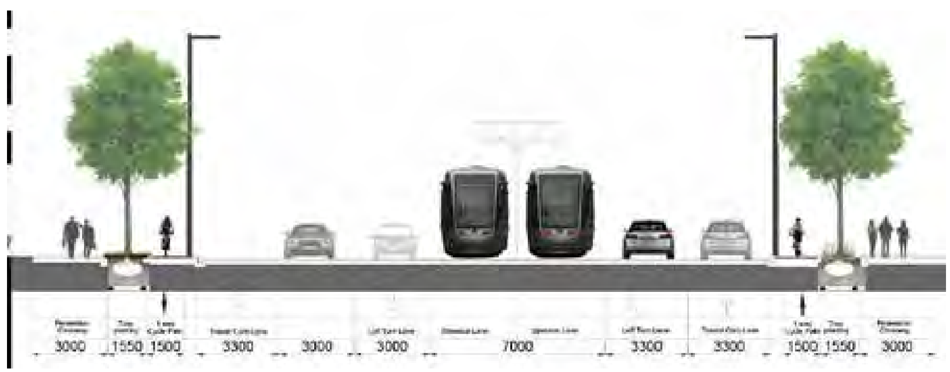
Wide boulevards have been incorporated into the design of Lake Shore Boulevard to provide for a high quality pedestrian and cycling realm.

Improve Pedestrian / Cycling Permeability

The introduction of a series of new signalised intersections along Lake Shore Boulevard adjacent to our site provides pedestrians and cyclists many crossing opportunities and improves permeability to Lake Ontario and the Martin Goodman Trail.







SECTION D-D
LAKE SHORE BLVD W - 36.0m R.O.W.

FIGURE 19   LAKE SHORE BOULEVARD DESIGN / CONSIDERATIONS

3.2.4 Park Lawn Road

Park Lawn Road runs in a north-south direction along the western boundary of the site between The Queensway in the north and Lake Shore Boulevard in the south as illustrated in **Figure 20**.

A right-of-way (ROW) widening of approximately 6 to 8 metres (from an existing 28 to 30 metres) has been taken on from the 2150 Lake Shore Boulevard West property to fulfill the 36.0 metre ROW as designated in Toronto's Official Plan.

South of the existing Westlake development signalised driveway to Lake Shore Boulevard, the pavement width of the road is approximately 20.0 metres and consists of two northbound lanes, two southbound left-turn lanes, one southbound through lane, and one southbound right-turn lane. No modifications to road cross section along this segment is proposed.

It is proposed to modify the existing Park Lawn Road lane configuration between the existing Westlake development site driveway intersection and the Queensway in order to better suit the evolving requirements of the site and wider area and to enhance the existing conditions for all users (pedestrians, cyclists, and motorists). Key modifications include:

- New four-legged signalised intersection with the South Beach Condos Driveway and a new site driveway which provides access to the underground parking and loading areas;
- Dual northbound left-turn lanes on Park Lawn Road at the westbound Gardiner Expressway on-ramp signalised intersection;
- Dual southbound right-turn lanes on Park Lawn Road at the westbound Gardiner Expressway on-ramp signalised intersection;
- Additional southbound left-turn lanes at new Relief Road and Park Lawn underground garage site driveway intersections; and,
- New northbound right-turn lane at Relief Road / Park Lawn Road intersection.

No modifications to the existing roadway width are proposed between the new Relief Road intersection and the Queensway. Additionally, no changes to the Gardiner Expressway and rail corridor underpass structure are proposed to accommodate the road modifications.

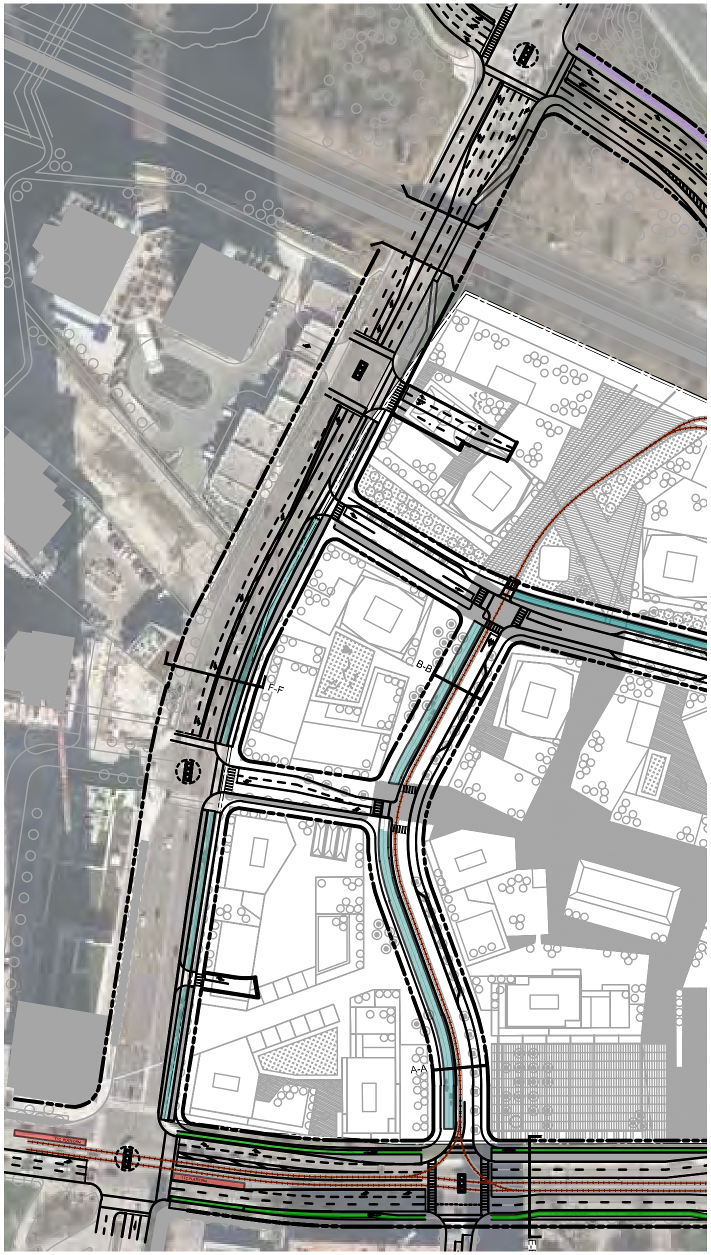
3.2.4.1 Multi-Modal Considerations

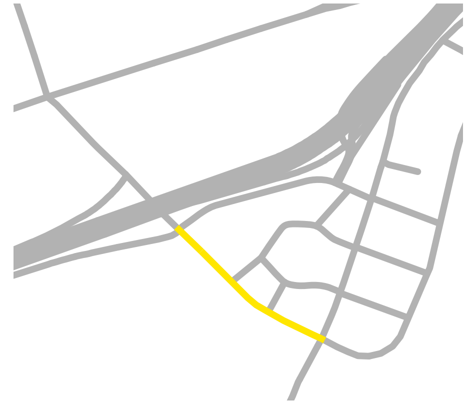
Currently, there are no provisions for on-street cycling infrastructure and minimal provisions for sidewalks on either side of the road. A wide pedestrian clearway (minimum 3.0 metres) and two-way boulevard cycle-track facility are proposed within the widened east boulevard between the Lake Shore Boulevard (and the Martin Goodman Trail) and Park Lawn GO station. This connection is further discussed in **Section 3.3.1.1.**

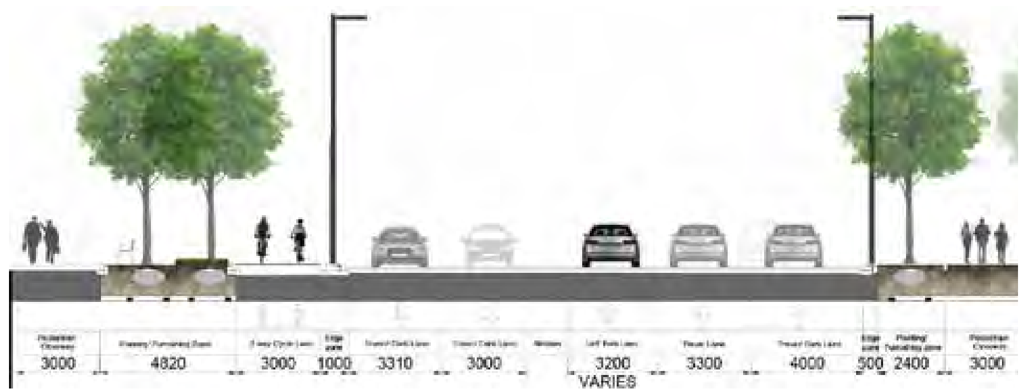
3.2.4.2 Park Lawn Road Considerations

Enhance Pedestrian and Cycling Realm

Improvements to the streetscape, pedestrian realm, and cycling infrastructure have been contemplated for Park Lawn Road between Lake Shore Boulevard and the rail corridor underpass. The wide boulevard allows for significant landscaping and planting that provides pedestrians and cyclists with a buffer from the vehicular traffic on Park Lawn and helps to form an active and inviting pedestrian edge to the site.







SECTION F-F
PARKLAWN RD - 36.0m R.O.W.

FIGURE 20 PARK LAWN DESIGN / CONSIDERATIONS

3.2.5 The Queensway

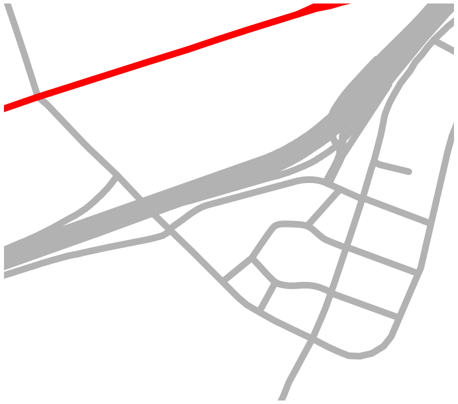
The Queensway is an arterial road that runs in an east-west direction in the vicinity of the site. It has a 30.0 metre right-of-way (ROW) as designated in Toronto's Official Plan.

As part of the proposed 2150 Lake Shore Boulevard West development, an additional eastbound right-turn lane is proposed on the Queensway at the Park Lawn Road intersection to additional storage capacity.

The proposed widening would extend 175 metres west and east of the Park Lawn Road / Queensway intersection. The proposed widening would not impact the Mimico Creek crossing.

At the Mimico Creek crossing, the existing roadway width is in the order of 17.5 metres consisting of a basic four-lane cross-section (two lanes in each direction). At the Park Lawn intersection, the pavement width is widening to approximately 20.5 metres to accommodate a two-lane eastbound cross-section and a two-lane west-bound cross-section with eastbound and westbound left-turn lanes, and eastbound and westbound right-turn lanes.

The eastbound left-turn lane and right-turn lane storage and taper lengths are 50 metres and 100 metres, respectively. The westbound left-turn lane storage and taper lengths are 30 metres and 120 metres, respectively. The existing westbound right-turn lane will be maintained.



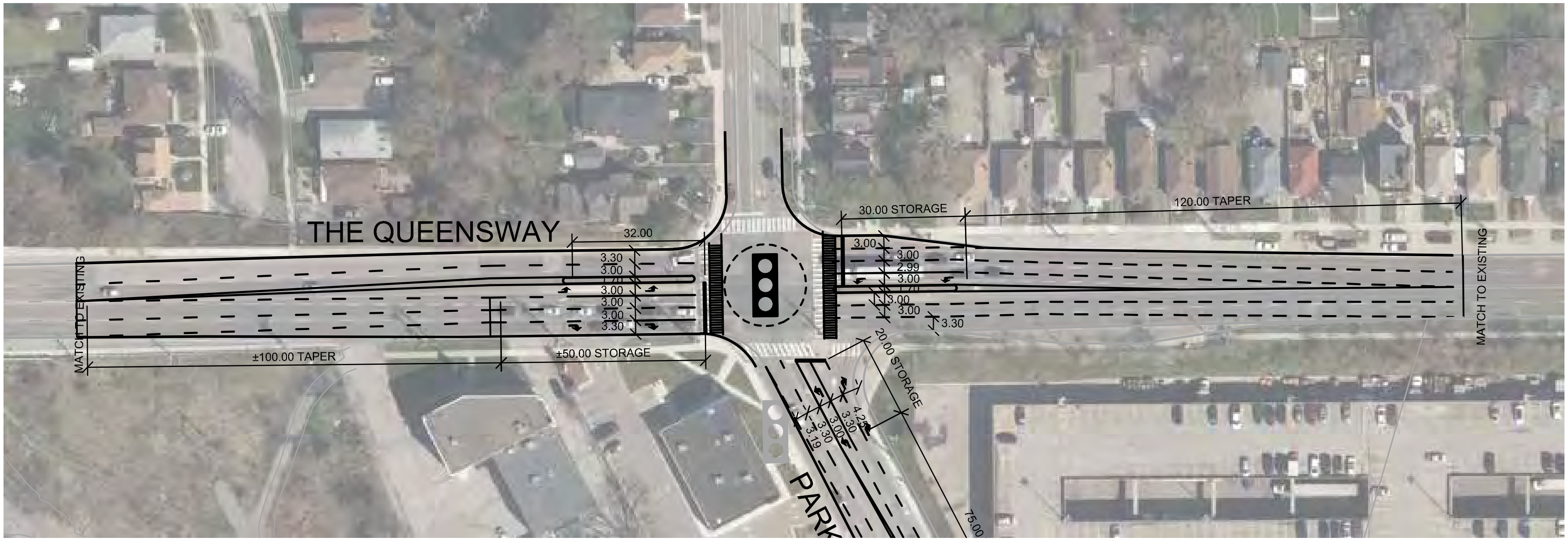


FIGURE 21 THE QUEENSWAY DESIGN / CONSIDERATIONS

3.2.6 Internal Public Street System

A network of public local streets are proposed within the Master Plan to provide connections from the site to both Lake Shore Boulevard, West and Park Lawn Road. This network will provide for public access to / from the new community and will be built upon a premise of providing an excellence in the public realm and pedestrian / cycling environment.

A main spine connection (Loop Road) within the Master Plan will accommodate the streetcar / LRT route, and provide for cycling and pedestrian connections to the new transit hub. The Loop Road also provides at-grade front door access to a large portion of the development. A series of layby areas will be provided along the Loop Road to accommodate this activity.

The public loop road within the site is proposed to have a right-of-way width of 23.0 metres to accommodate the needs (transit infrastructure, bicycle infrastructure, roadway) associated with the development while provide for ample boulevard space for pedestrians.

The design of the Loop Road places transit first by ensuring that streetcar vehicles are able to travel to / from the new Park Lawn GO station with minimal delay and conflicts with other road users. Placing transit with a dedicated and separated transit lane will give transit priority and limit the impact that congestion may have on the level of service.

The road has been designed to accommodate one-way vehicular traffic in an anti-clockwise direction, while accommodating transit (streetcar) in the opposite (clockwise) direction. By limiting the direction of general vehicular traffic travel, it reduces the opportunity for conflict at the intersections and the need to provide additional turning lanes and signalisation these intersections within the site. Additionally, the one-way operation of the loop minimises the amount of cut-through (non site related) traffic through the heart of the development, further improving the pedestrian realm and safety.

3.2.6.1 Multi-Modal Considerations

A two-way cycle track is proposed on the outer edge of the Loop Road which provides connections to Lake Shore Boulevard West and key destinations within the site (e.g. Transit Hub, new Public Park, etc.).

The 4.0 metre wide bi-directional cycle track provides a facility separated from vehicular and streetcar / LRT traffic, improving perceived comfort and safety for cyclists.

3.2.7 Private Streets

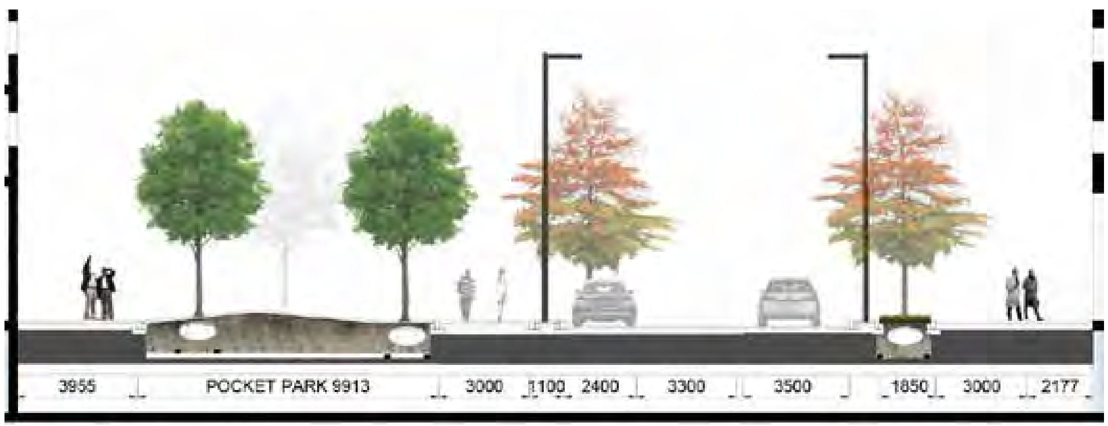
A complementary pair of private street connections are also being proposed to link the Loop Road to Park Lawn Road and Lake Shore Boulevard West. These connections are proposed to operate, look, and feel like public streets but are kept private to enable to the integration of below grade servicing and parking connections between different development blocks within the site.

Strategic design and traffic calming measures (e.g. narrow lanes, trees / landscaping, and speed reduction measures) should be considered on these private streets to minimise traffic volumes, and improve pedestrian and cyclist safety.

Laybys are also incorporated into the roadway design to accommodate pick-up / drop-off needs associated with the adjacent development blocks.

FIGURE 22 INTERNAL STREETS PLAN

SECTION B-B
LOOP ROAD - 23.0m R.O.W.



SECTION G-G
PRIVATE ROAD "A" - 20.0m R.O.W.

FIGURE 23 INTERNAL STREETS CROSS-SECTIONS

3.3 THE ACTIVE NETWORK

The proposed development aims to introduce new and active access to site facilities that directly connect to key destinations (e.g. Park Lawn Station) and the surrounding area (e.g. adjacent neighbourhoods). Another fundamental aspect to the site plan includes forming convenient connections to the high quality existing recreational systems, such as the Martin Goodman Trail.

3.3.1 Key Elements and Objectives

The key elements, objectives and design considerations of the active network are as follows:

Opening the Site to Non-Auto

The proposed development provides a number of opportunities to shift from auto dependency to active transportation, through enhanced cycling, transit, and pedestrian facilities. As these sustainable travel networks become more robust, the increased level of site access and proximity to major destinations (e.g. new Transit Hub, Park, and Galleria) will encourage walkability and physical activity.

Public Realm Focus

The site aims to emphasize the public realm through the provision of new public and private streets that are well designed for diverse modes (e.g. cycling, transit, and on-foot travel). Adjacent to these streets, the site will provide a great deal of urban spaces and places where residents, workers, and visitors can interact and explore. The development will ultimately foster a sense of community with its animated streetscapes and high street-level activity.

Transit Integration

The site provides the opportunity to integrate area local and regional transit services (e.g. bus services, streetcar/LRT and GO Rail) through the emergence of a transit hub / terminal in Toronto West. This will form a major transfer point and transit-centric community that will maximize connectivity, servicing new area residents. Transit connectivity will also be enhanced for users during harsher weather conditions (e.g. winter months), where walking or cycling is not desirable.

Complete Streets Designs

The development of the site supports the desire to design a complete street; a street that is accessible by multiple user groups of travel mode and ability. The roadway design will be enhanced to provide adequate space for active transportation users within the facility, during both on and off-peak hours.

Cycling Connections

With consideration to the lack of existing cycling facilities in the area, the proposed development assists in completing the bicycle route network – both within and around the site property. In this Plan, new cycling connections will be made to / from major trail systems, key destinations, and accesses and entrances for seamless travel. Cycling routes will be planned that connect directly to the station platform access, which will contribute to the overall attractiveness of the Station.

Network Building

On a local and broad scale, the site will develop new pathways, roads (public and private), and facilities that will help form well-connected active transportation networks. The centre of the site will serve as the heart of the community, where the networks meet and generate the greatest activity. The provision of these internal networks provide the opportunity to fill in the missing gaps and connect to existing routes.

Pedestrian Crossings

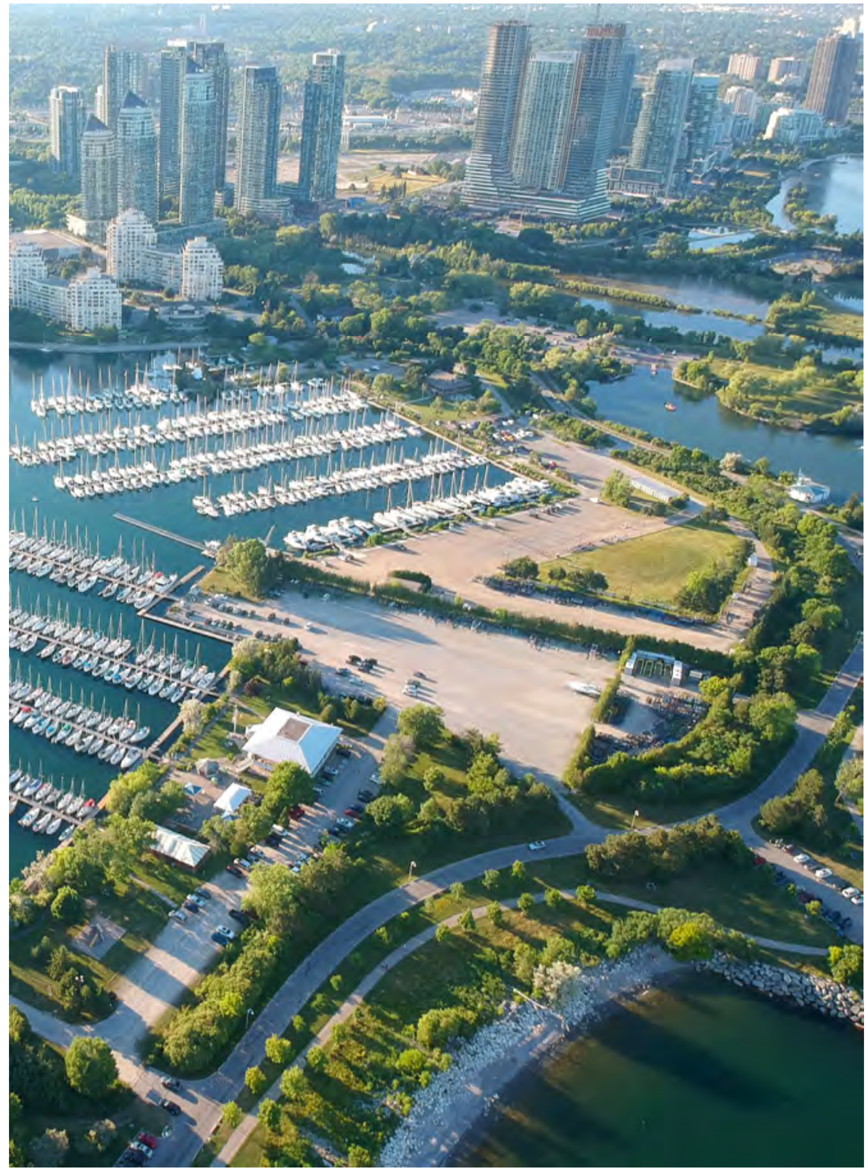
The proposed development aims to provide relatively short, yet accessible crosswalks to enhance safety for pedestrians along busy roads. These crossings will help increase the permeability of the site and generally contribute to the improvement of the public realm.

3.3.1.1 Site-Specific Cycling Infrastructure

The proposed development raises a significant opportunity to provide cycling infrastructure in the area that is not currently available. The following five (5) cycling connections are proposed as part of the site development:

- Multi-use paths along the Relief Road;
- Two-way cycle tracks along Loop Road;
- One-way in-boulevard Cycle Tracks along Lake Shore Boulevard West;
- Two-way cycle tracks along Park Lawn Road; and
- Shared cycling /vehicular lanes on the private streets.

These routes allow prospective users of the site to become well-connected to major routes within the surrounding cycling network, including the Martin Goodman Trail and Humber River Trail.



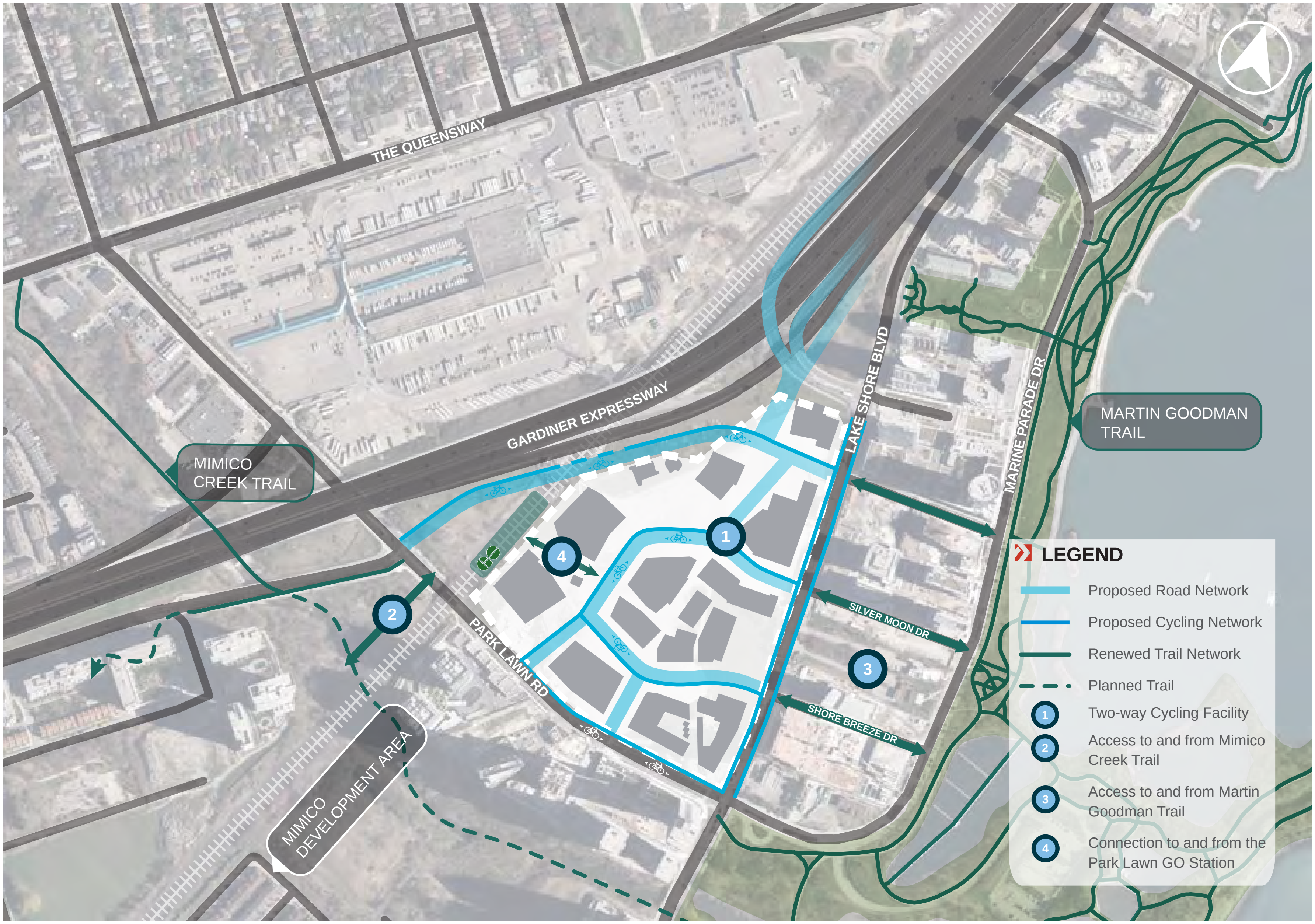


FIGURE 24 PROPOSED CYCLING INFRASTRUCTURE

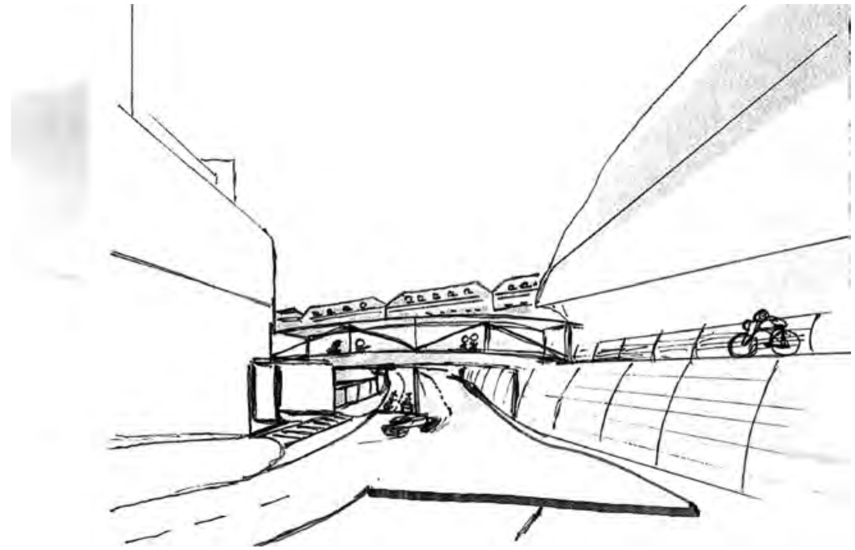
Relief Road Multi-use Path

The aspirations of the proposed development presents an opportunity to provide a mixed-use path along the Relief Road. This cycling / pedestrian facility is located on the north side of the roadway, between the Relief Road and the Gardiner Expressway.

A 3.0m wide mixed-use facility will help facilitate a linkage between the Mimico Creek Trail to the west of the site, and the Lake Shore Boulevard cycle tracks. It will provide a direct connection to / from the bicycle parking area (mezzanine – 84.00 level) and new public park to be dedicated to the city. This connection over the Relief Road will be provided via a dedicated pedestrian and cycling bridge.

The multi-use path will be elevated for the purpose of relieving cyclists and pedestrians from the considerably drastic elevation changes required at the roadway level to provide sufficient height clearances for trucks at the rail underpass. A pedestrian / cycling bridge over the Relief Road capitalises on the elevation difference to provide a grade separated crossing to the development. This bicycle design aims to reduce major slopes and create a safer / more comfortable experience for cyclists.

The path also physically separates cyclists from vehicles on the roadway, and improve the experience for the pedestrians and cyclists, helping to further encourage the use of cycling to the new GO station by area residents and commuters.



Loop Road Two-Way Cycle Tracks

A 4.0 metre two-way cycle track is proposed on the Loop Road in order to provide a dedicated, separated cycling facility that connects to the heart of the development and various activity nodes. The facility will run parallel to the sidewalk on the outer side of the loop and will be separated from the pedestrian clearway by vegetation to provide delineation of spaces.

The facility will provide for increased safety and comfort of cyclists while allowing the streetcar and vehicular traffic to function within a separate right-of-way. This physical separation increases safety for multi-use path users.

A width of four (4) metres is proposed to provide ample space for bidirectional cyclists.

In-boulevard Cycle Tracks along Lake Shore Boulevard

1.8 metre wide cycle tracks are proposed on Lake Shore Boulevard between Park Lawn Road and the new intersection with the Relief Road. These in-boulevard cycle tracks offer cyclists an added level of separation and protection from vehicular traffic. The provision of these facilities are consistent with creating a “main street” and avenue character on Lake Shore Boulevard West.

The in-boulevard cycling facility will operate along both sides of the roadway and facilitates a connection to the existing on-street bike lanes east of the site from the Martin Goodman Trail and possibly, an extension of the Mimico Creek Trail west of the site. This facility will connect directly into the Loop Road and Relief Road cycling facilities. A number of new signalised intersections along Lake Shore Boulevard will help facilitate the crossing and access into the site.

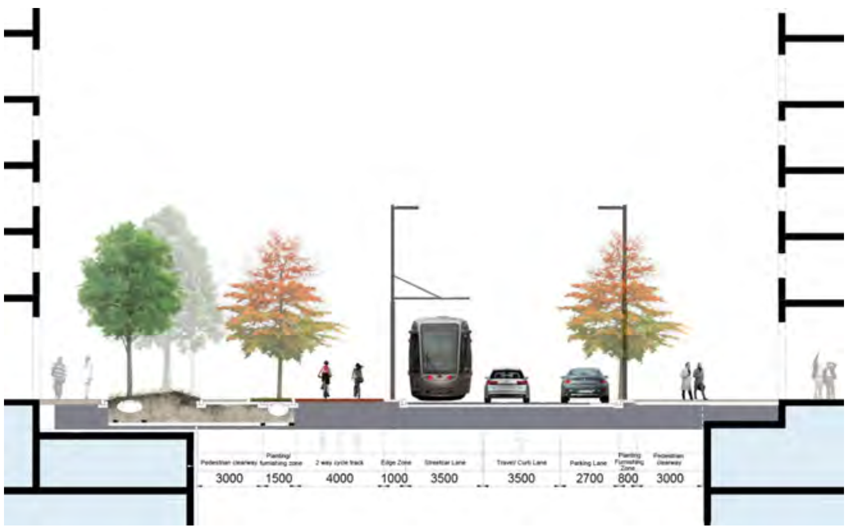


FIGURE 25: LOOP ROAD CROSS-SECTION

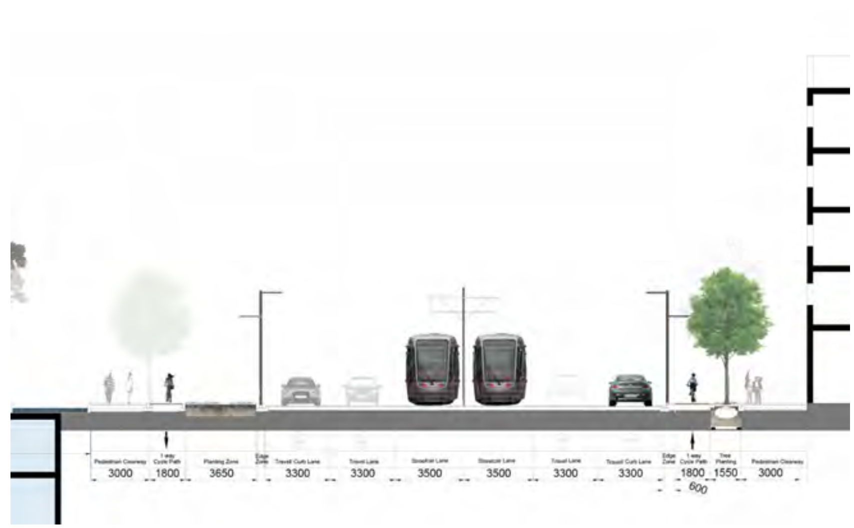


FIGURE 26: LAKE SHORE BOULEVARD CROSS-SECTION

Park Lawn Road Two-Way Cycle Tracks

A 4.0 metre two-way cycle track is being proposed along the east boulevard of Park Lawn Road. A widening of the Park Lawn Road right-of-way in response to the City's Official Plan, presents an opportunity to provide a high-quality cycling facility in the widened boulevard. This cycling facility, which runs from Lake Shore Boulevard in the south to the new private street will provide direct access to key site destinations (e.g. the Transit Hub, and the Loop Road cycling facility) from the Martin Goodman Trail and Lake Shore Boulevard cycling facilities.

This facility prioritizes cyclist safety by bridging gaps between the existing and proposed cycling facilities in the south and the site. A landscape buffer between the facility and the roadway, as well as between the cycle tracks and the pedestrian clearway will help provide additional comfort and separation for cyclists on a high volume vehicular road, and offering separation from pedestrian paths.

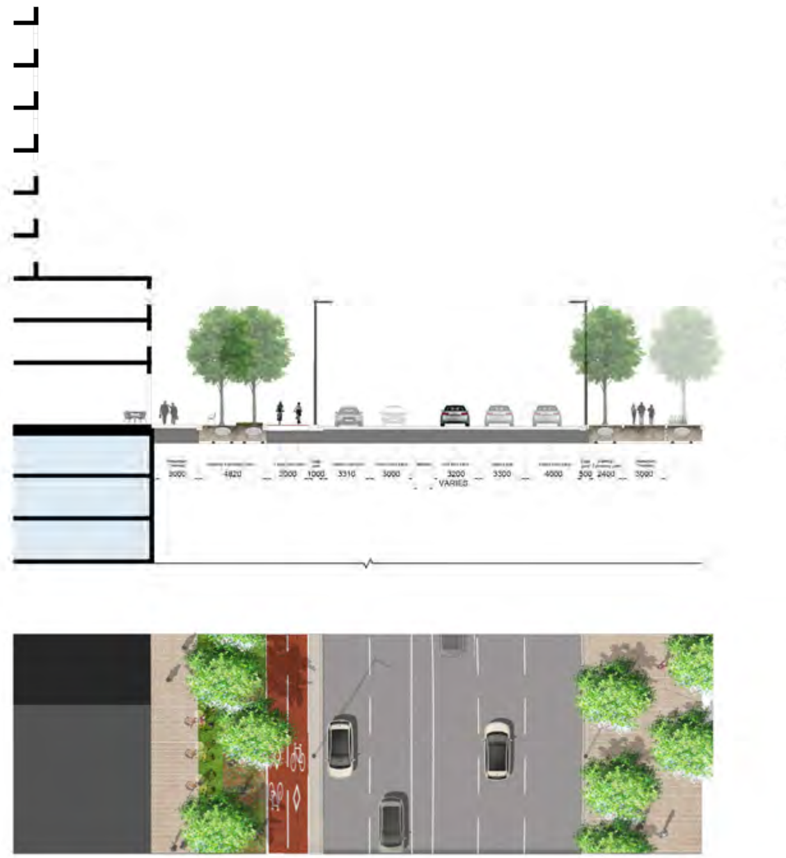


FIGURE 27: PARK LAWN ROAD CROSS-SECTION

Cycling Facilities on Private Streets

The proposed private streets are essential connections that bridge major cycling facilities, more importantly, the Park Lawn Road two-way cycle track and the Loop Road two-way cycle track. Private Street “A” presents an opportunity to provide shared, on-street access to / from the site and the broader cycling network. These private streets will function as low volume, low speed vehicular roads, and shared use of the road with vehicles is encouraged. The design of the roads, included materiality will help with achieving these goals. Further consideration and refinements regarding the design and materiality will be made as part of the ongoing design development of the project.

These private streets will also provide direct access to / from vehicular access ramps, and bicycle parking entrances, which offer opportunities for cyclists to enter the bicycle parking areas within each development block.

These streets will have a minimum width of 6.6 metres to provide a sufficient level of comfort between cyclists and other travel modes.

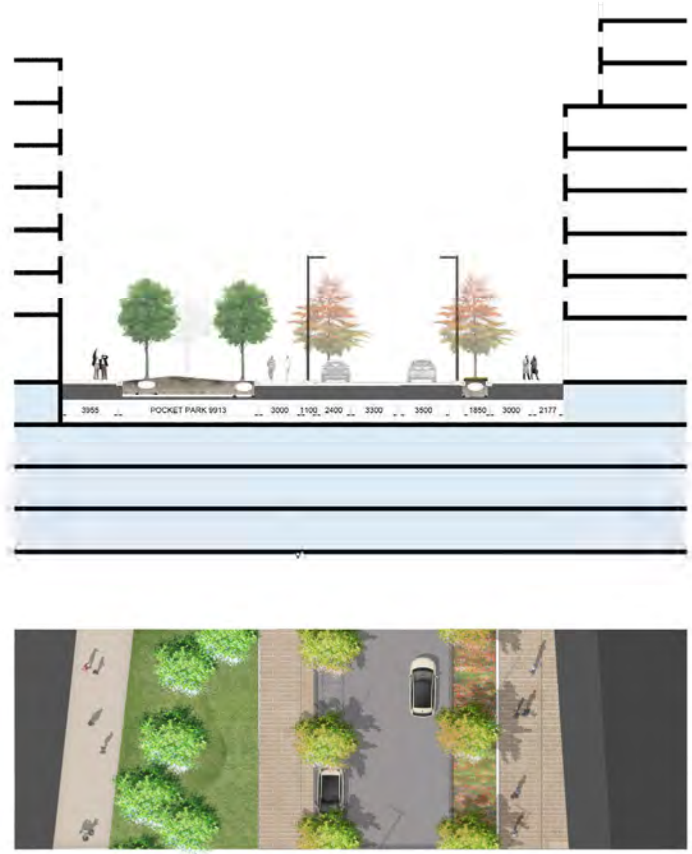


FIGURE 28: PRIVATE STREET CROSS-SECTION

3.3.2 Planned Pedestrian Network

3.3.2.1 Site-Specific Pedestrian Facilities and Improvements

The site development emphasizes pedestrian mobility and aims to provide a safe, attractive, and walkable public realm throughout the site in its entirety. The following provides a list of the noted pedestrian enhancements to the site and surrounding area:

- Multi-use path and sidewalks along the Relief Road:
- Wide boulevard areas along the Loop Road;
- Signalised crossing opportunities along Lake Shore Boulevard West;
- Boulevard / sidewalk widenings along Park Lawn Road;
- Internal pathways through site.

Multi-use Path and Sidewalks along the Relief Road

The proposed site presents the opportunity to incorporate a multi-use trail in the north side of the Relief Road to facilitate an enhanced connection to / from the Transit Hub via a pedestrian / cyclist bridge to the station mezzanine / concourse level. This 3.0m wide trail, shared with cyclists will provide a linkage between Lake Shore Boulevard, the station, and an extension of the Mimico Creek Trail.

Sidewalks along the south side of the Relief Road, will form part of the streetscape that will interact with the Transit Hub, and activated building uses on the property.

Widened Sidewalks along Loop Road and Park Lawn Road

Wide boulevard spaces along the Loop Road and Park Lawn Road offer the opportunity to create high quality pathways / sidewalks that help improve the pedestrian realm and create a sense of place within the development. Both of these street will be consciously designed with Complete Streets Guidelines in mind and to accommodate the high levels of pedestrian activity anticipated on these roads.

A minimum of 3.0 metre sidewalks (with opportunity to create additional walking space on private land), will be largely separated from the cycling facilities, and is anticipated to help meet the pedestrian demands associated with the site and station activity.

Formal Crosswalks along Lake Shore Boulevard

The creation of new intersections along Lake Shore Boulevard between the existing Park Lawn Road and Brooker's Lane intersections provides an opportunity to improve pedestrian permeability to / from the lake and improve pedestrian safety by provide multiple opportunities to cross Lake Shore Boulevard West.

These crossing locations help facilitate pedestrian desire paths to the activity nodes in the site (e.g. galleria, public park) and, especially the transit hub. The signalised pedestrian crossings will be designed with the pedestrian first and undertake all possible design / geometric measures to limit conflict areas, manage vehicular turning speeds, and improve visibility from drivers. The signalised crosswalks will also provide accessible pedestrian signals for those with visual or hearing impairments.

Internal Pathways throughout Site

A number of pedestrian only pathways are proposed within the site plan improve the pedestrian porosity and access to and from key site developments and destinations. Some of these notable pathways include the pathways within Block B, the galleria space within Block A and a mid-block connection within Block C.

This internal pathway network maximizes pedestrian connectivity within a local community scale, as well as the broader facilities along major roads towards adjacent neighbourhoods. These additional connections best respond to the potential pedestrian desire lines.

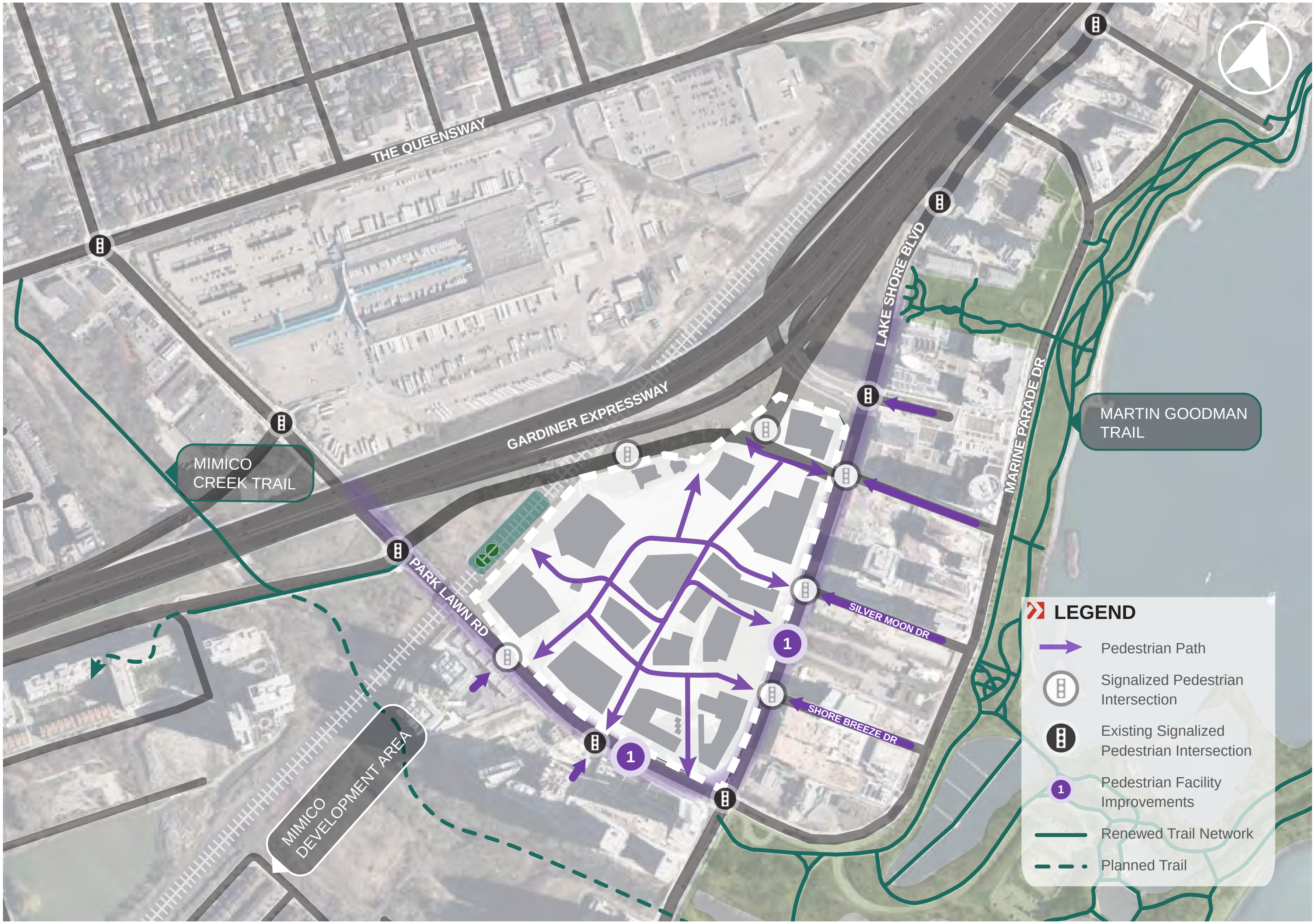


FIGURE 29 PEDESTRIAN NETWORK

3.4 THE URBAN PLAN

The proposed site plan is for a mixed-use neighbourhood that includes residential, retail, office, hotel, and other supporting uses within six (6) main development blocks (A-F). The proposal includes a parkland dedication to the city along with an internal public street network. There are several privately owned open spaces and squares which help foster the building of a community and a high quality public realm.

The current development programme comprises of the following uses and statistics. A common below grade underground parking garage and servicing area is proposed below the development.

- Residential: 7,444 units (538,502 sq. metres GFA)
- Office: 41,924 square metres GFA
- Retail: 42,701 square metres GLA
- Hotel: 20,236 square metres GFA

In direct response to the evolving neighbourhood, and the new transit hub, the Master Plan has been developed with a focus on creating an environment that emphasizes the quality of place and the public realm as part of a complete community. The plan takes advantage of the single ownership of the site to consolidate vehicular facilities and access to minimise the intrusion of servicing, loading, and high traffic activity at grade within the heart of the Master Plan.

To achieve this, the transportation elements proposed as part of the Master plan reflect the following key principles:

- enhancing the public realm;
- delivering a truly mixed-use community;
- facilitating pedestrian mobility;
- supporting active transportation systems;
- leveraging new transit infrastructure;
- improving surface transit / traffic operations; and,
- prioritising Transportation Demand Management.

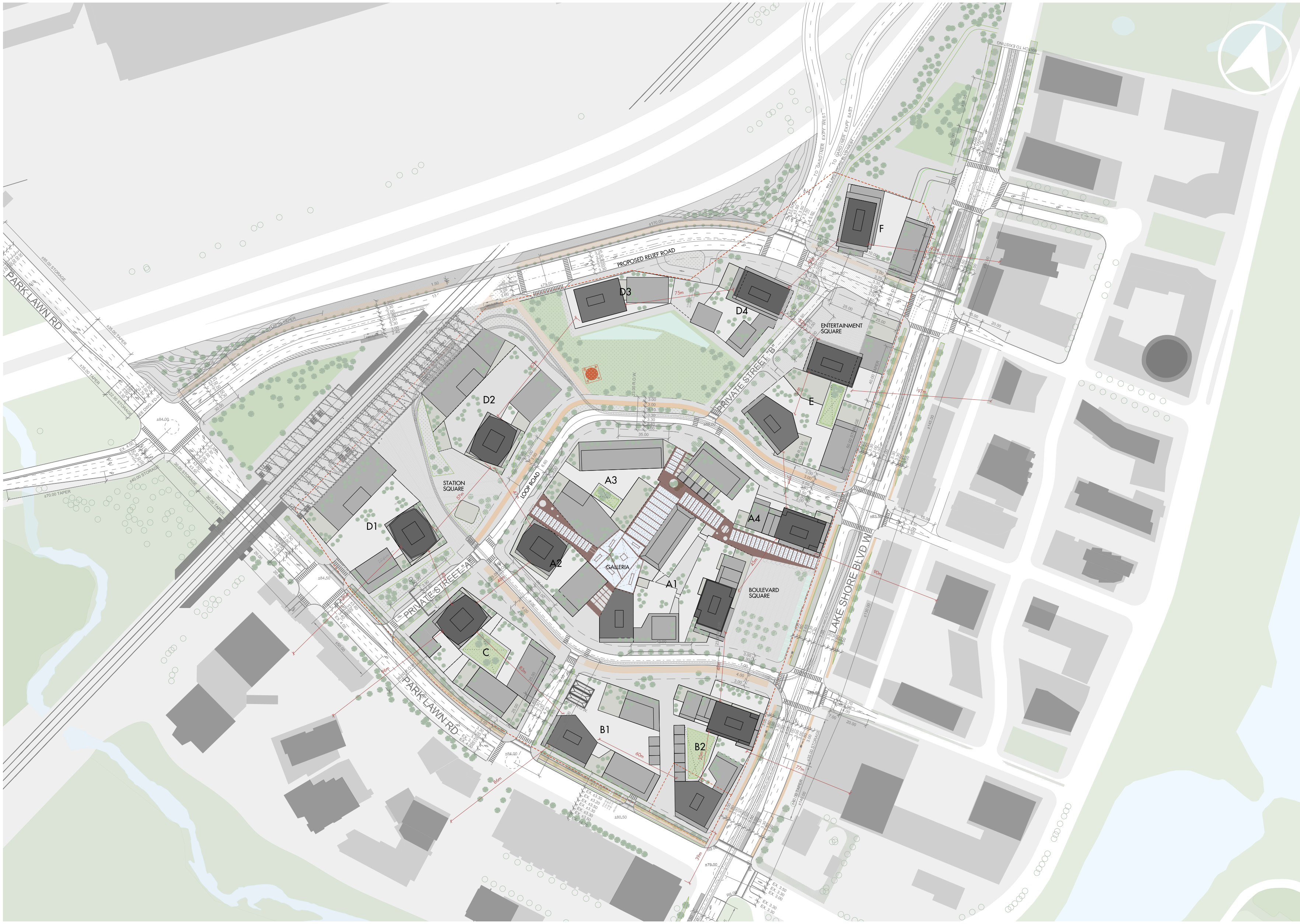


FIGURE 30 THE URBAN PLAN

3.5 THE MOBILITY (TDM) PLAN

3.5.1 Mobility Objectives

The Integrated Mobility Plan is proposed to guide the provision of viable alterative personal transportation options beyond the single-occupant, private automobile. The objective is to encourage travel behaviour and patterns that are sustainable. The primary objectives are:

- Reducing demand on road infrastructure, thereby minimizing road and parking capital expenditures;
- Increasing travel efficiency;
- Reducing climate change emissions;
- Improving air quality; and,
- Improving overall health.

To achieve the objectives, a series of mobility strategies and corresponding Transportation Demand Management (TDM) measures are outlined and have been considered as part of the site development and future operations, to promote the use of more active and sustainable transportation modes, respond to the mobility needs of residents, employees and patrons to the site, and reduce dependence on the private automobile.

3.5.2 Mobility Strategies

TDM strategies include the application of various site design elements and property management/operational policies that have the goal of redistributing and reducing the travel demand of a project, specifically that of single occupancy private vehicles. The objective can be achieved by influencing mobility choice and patterns through the following strategies:

- Vehicle Parking Supply and Management
- Facilitation of Reduced Car Ownership and Usage
- Encourage Transit Use
- Encourage Bicycle Use
- Enhance Pedestrian Mobility
- Land Use and Building Infrastructure
- Coordination, Communication and Promotion

This comprehensive framework has been developed to serve as a guideline for the implementation of effective TDM strategies during the site design stage, as well as in its operations following the full redevelopment of the property.

3.5.3 Mobility Measures

Each strategy has possible measures that can and should be implemented as part of the planning, design, and operations of the site and surrounding area. As such, the possible measures are categorized and discussed with respect to their implementation stage / consideration:

- **Infrastructure** (external links and facilities)
  Physical infrastructure to improve the alternative (active, transit) mobility transportation realm along the boundaries of the site and to facilitate the integration of pedestrian, cycling and transit infrastructure

- **Facilities and features of the site plan and design**
  Physical aspects of the internal design of the development, including its buildings, open spaces and circulation routings to promote alternative transportation modes

- **Building operations / property management**
  User-focused programs and policies enacted once the site is operational to encourage alternative transportation modes

- **Monitoring**
  Post-occupancy data collection programs used to assess travel patterns and gauge the effectiveness of TDM strategies and the Mobility Choice Travel Plan as a whole

3.5.4 Implementation Responsibilities

In regards to implementation, there are three levels of influence and responsibility groupings:

- City – broad infrastructure
- Developer / Manager – site systems and facilities
- Users – what people choose to do and how they use the systems

3.5.5 Recommended TDM Plan

The future site context provides for frequent, public transit services and improved pedestrian and cycling connectivity. While strong opportunities exist in the area's infrastructure to accommodate sustainable transportation practices, the ability to fully leverage these opportunities, ensuring the success for the Mobility Plan strategies is important.

To this end, Mobility Plan strategies are presented with targeted "intents" (e.g. what it is trying to achieve and for whom), accompanied by methods of implementation. Potential strategies are then framed in the context of the development and the strategies most appropriate for application are proposed.

A summary of the mobility strategy is outlined below. It is important to note that these TDM strategies will be continuously refined throughout the application process.

TABLE 1 POTENTIAL MOBILITY TRAVEL PLAN

Strategy		Intent	Possible Measures	Master Plan Measures
Vehicle parking supply & management		• Reduce the attractiveness of car use for residents, employees and visitors • Reduce car ownership needs • Encourage higher vehicle occupancy • Encourage the use of other travel modes	**Building, Planning & Design** • Establish appropriate minimum parking supply standards for the proposed land uses and buildings that may be reduced to compare to the existing Zoning By-law • Adopt a sharing of all non-residential parking to maximize the efficient use of the available supply • Provide preferred high-occupancy vehicle / carpool parking **Operational / Management** • Operate the majority of the site parking supply as paid parking for non-residents • Adjust parking fee structure, operations and parking allocations to support non-automobile usage goals and to accommodate changing parking needs • Offer parking to residents 'unbundled' from unit purchase	• Residential and non-residential parking will be provided a reduced rates (PA-3 or lower) • Sharing of parking amongst non-residential uses will maximize the efficiency of the supply
Facilitation of reduced car ownership & usage		• Reduce the need for residents and employees to own a car for occasional travel • Reduce the likelihood of privately-owned car use for general travel, particularly during peak periods	**Operational / Management** • Operate a car-share program on-site that members can access "on demand" • Provide and manage a carpool / ride-matching and guaranteed ride home programme for residents and employees • Coordination with building employers to offer flexible work hours and compressed work week opportunities for staff • Provide information and communication items that outline the availability of the on-site services as well as broader taxi and ridesharing services • Provide incentive programs design to encourage the use of on-site services including corporate or private membership to car-share / car-pool services **Monitoring** • Monitor car-share program membership and usage, and adjust car deployment to respond to demands • Monitor carpool and ride-matching programs, and adjust to suit needs of residents, employees and visitors	• Provision of information to site residents and employees regarding the availability of car-share provided within the area.

TABLE 1 POTENTIAL MOBILITY TRAVEL PLAN CONTINUED

Strategy		Intent	Possible Measures	Master Plan Measures
Encourage transit use		• Increase awareness and viability of transit travel options for commuter and recreational travel purposes • Capitalize on the improving transit context • Support the use of transit	**Building, Planning & Design** • Provide accessible and high-quality pedestrian connections towards transit from the site • Establish transit stops at key neighbourhood locations • Provide facilities that support transit passenger travel including weather protection and amenities along key travel paths within the site • Facilitation of accessible transit services (e.g. WheelTrans) **Operational / Management** • Encourage on-site PRESTO card sales • Provide transit service information for site users • Offer transit promotion programmes • Consider providing shuttle service to key destinations Work with City / regional transit operators and other stakeholders to review and improve accessibility to existing / new surface transit routes	• Creation of a new multi-modal transit node along the Lake Shore West GO corridor • Minimize transit transfer times by creating an integrated transit station between TTC streetcars, buses, and GO trains • Collaboration with public transit agencies (TTC and Metrolinx) to coordinate and plan for service expansion
Encourage bicycle use		• Provide physical and operational infrastructure on-site • Cooperate with the City to enhance bicycle connectivity within the area to the broader network	**External Infrastructure** • Work with the City to improve existing facilities and provide new connections in the site area **Building, Planning & Design** • Provide secure long-term bicycle parking in convenient and accessible locations • Provide short-term bicycle parking distributed across the site in accessible locations • Meet or exceed the minimum requirements of the Toronto Green Standards • Provide shower and change facilities within office buildings for staff and visitor use in accordance with the requirements of Toronto Green Standards • Provide dedicated station / commuter parking to encourage uptake of cycling as a last mile mode of transportation **Operational / Management** • Consider bike-share stations within the site at convenient locations • Encourage an on-site bicycle repair / maintenance centre, or bicycle parking valet	• The proposed bicycle parking supply is intended to meet TGS Tier 1 standards • Convenient access to the bicycle parking in the new GO Station will be provided via the Relief Road • Provision of dedicated cycling facilities on the Relief Road, Lake Shore Boulevard, Park Lawn Road, and Loop Road.

TABLE 1 POTENTIAL MOBILITY TRAVEL PLAN CONTINUED

Strategy		Intent	Possible Measures	Master Plan Measures
Enhance Pedestrian Mobility		• Enhance the walkability of the site at-grade and create a pedestrian-scaled neighbourhood • Assist in creating high-quality, safe pedestrian linkages to the site and wider network • Improve the quality of the public realm and accessibility of the area • Enhance ability to travel to transit focal points without a vehicle	**External Infrastructure** • Work with the City towards realizing improvements to area pedestrian infrastructure quality of the public realm and the convenience of pedestrian linkages / road crossings along the site boundaries and in the site area **Building, Planning & Design** • Provide high-quality, safe pedestrian-scale connections from the site property to the surrounding public street network • Facilitate convenient building access and connectivity • Provide accessible and universal connectivity throughout the site, meeting appropriate accessibility codes and guidelines **Operational / Management** • Maintain on-site pedestrian facilities to enable year-round pedestrian access and usage	• New crossing opportunities along Park Lawn Road and Lake Shore Boulevard West are proposed as part of the Master Plan • Increased pedestrian permeability through the site • Vehicular accesses are consolidated and exterior to the site, creating pedestrian oriented internal streets • Widened sidewalks, and improved boulevards to improve the pedestrian realm and support the anticipated pedestrian activity.
Land use & building infrastructure		• Offer a variety of residential and non-residential uses on-site • Reduce the need for residents, employees and visitors to travel off-site to address daily needs • Shorten travel distances • Support residents that work from home	**Building, Planning & Design** • Provide for a range of employment, retail and residential uses within the proposed buildings • Provide for support services and amenities within the site, with potential for a day-care, community amenity areas and a post office • Provide technology and communications support infrastructure and facilities within the residential buildings that support telecommuting and other work from home practices	• The proposed development offers a variety of uses – employment, retail and residential– that allow people to meet multiple needs on-site. • This will create internal site trips that are easily made on foot.

TABLE 1 POTENTIAL MOBILITY TRAVEL PLAN CONTINUED

Strategy		Intent	Possible Measures	Master Plan Measures
Coordination, communication & promotion		• Inform and raise awareness of non-automobile travel options for the site • Actively promote non-automobile travel options and services • Introduce, develop and coordinate TDM programs / indicatives with the employment tenants within the context of the broader strategies in place • Ability to adapt the strategy based on changing demand and special circumstances as they may arise	**Operational / Management** • Establish a TDM Coordinator Office that supports activities and advances TDM strategies, programs and implementation protocols for the site • Establish a consultative framework to liaise and empower building tenants, businesses and residents to engage in dialogue with the City, transit providers, and other service providers to advance the needs of the development and surrounding area • Use of wayfinding and multi-modal navigation tools to augment the TDM services provided on-site • The active marketing, branding and promotion of non-automobile travel options (e.g. fairs, events and other incentive programs) **Monitoring** • Monitor the success of programming by the TDM Coordinator Office • Measure the site's modal split over time to examine the effectiveness of TDM interventions • Refine programming on an ongoing and coordinated basis	• New residential, office and retail tenants will be made aware of the existing transit services and active transportation facilities on-site and in proximity to the site.

4.0 FUNCTIONAL SITE PLAN ELEMENTS

Central to the 2150 Lake Shore Boulevard West Master Plan is the creation of an excellent public realm at-grade. To prioritize the pedestrian and cyclist at-grade, the vehicle elements of the site plan were largely removed from the "heart" of the Master Plan, enabling a more pleasant pedestrian experience within the centre of the Master Plan. The vehicular systems and associated access across multiple development blocks were consolidated and placed on the adjacent street network to minimize the intrusion of servicing / loading and vehicle activity at-grade. This removed the need to provide multiple separate loading facilities for each building or development block.

This comprehensive approach of planning and integrating the vehicular systems take advantage of single ownership of the Site in order to develop a high quality public realm at-grade.

4.1 SITE ACCESS AND CIRCULATION ARRANGEMENTS

The Master Plan migrates all parking and loading facilities below-grade in a consolidated basement beneath the development parcels and outside of the proposed public road network and park to be dedicated to the City.

To achieve the level of consolidation sought, below-grade "tunnel" connections between development blocks on either side of the public Loop Road were required to provide connections to parking, PUDO, and loading facilities. These connections facilitate a defined parking circulation route, allowing vehicles to access all portions of the main garage from all accesses, namely the Park Lawn Road and Relief Road signalized site driveway entrances.

Further details related to the various site plan elements (i.t. pick-up/drop-off, parking, loading, and bicycle parking facilities) will be determined in further detail in the following sections.

FIGURE 31 SITE ACCESS ARRANGEMENTS

4.2 PICK-UP / DROP-OFF CONFIGURATION

The decrease in car parking demands has enabled the rise in emerging ride sharing services, such as Uber and Lyft. Although these services promote the reduction of overall occupant vehicle use, they require space to allow for the associated pick up / drop off activities to occur in a safe and organized manner.

Pick-up / drop-off (PUDO) facilities have been incorporated into the master plan to accommodate two general groups of users:

1. Users travelling to / from the GO station; and
2. Users travelling to / from buildings and areas within the development.

4.2.1 Planned Pick-up / Drop-off Facilities

These groups of people will generate different demands within the site both temporally and spatially. Various pick-up / drop-off facilities locations have been incorporated into the master plan to accommodate the diverse user groups. These facilities will be generally located as follows:

- a below-grade pick-up / drop-off for Park Lawn GO Station and adjacent office uses;
- short-term surface layby spaces along the public and private streets;
- short-term parking spaces adjacent to residential core locations within the underground parking garage; and,
- a pick-up / drop-off (valet) area adjacent to the hotel.

The arrangement of these pick-up / drop-off areas will be further refined as part of the design development process.

Park Lawn GO Station Pick-Up / Drop-Off

A P1 (±79.00) below-grade pick-up / drop-off facility is planned to directly connect to the Transit Hub Mezzanine (Concourse) level via vertical circulation elements. This gives passengers an opportunity to seamlessly connect to the train, streetcar / LRT, and bus platforms entirely within weather protected areas. Appropriate way-finding signage will be provided within the pick-up / drop-off area to inform, direct and guide users.

This pick-up / drop-off loop will be primarily accessed via the proposed signalised site driveways on the Relief Road and Park Lawn Road. Adequate queueing and waiting space will be provided for rideshare (e.g. Uber and Lyft) and taxi vehicles waiting to pick-up passengers. A loop design will also offer ultimate flexibility for access / egress to and from the two main site driveways.

This centrally located facility is also anticipated to meet the associated site (office, retail and residential) related pick-up / drop-off demands for Blocks D1 and D2. This high-quality, central facility may function as one of a few "designated" ride-share pick-up locations within the site.

At-Grade Short-Term Layby Spaces

Approximately twenty-seven (27) and twelve (12) on-street layby spaces are proposed along the Loop Road and the private streets, respectively. These at-grade spaces are intended to be appropriately signed with a maximum parking time limit of 15 minutes to allow pick-up / drop-offs and deliveries to occur.

The laybys at street level will be well located respective to various uses and building entrances (retail, office, entertainment, and residential) and will help meet their pick-up / drop-off demands. These spaces will be highly visible and will be accessible via the one-way clockwise Loop Road.

Short-Term Parking Spaces (Underground Parking Garage)

Underground pick-up / drop-off spaces will be located on the P2 public commercial parking level, adjacent to each of the residential core locations. These spaces, located near the entrances of the residential buildings will help primarily facilitate residential-related pick-up / drop-off activity. Parking will be limited to a maximum duration of fifteen minutes.

Access to these spaces will be from any of the commercial parking garage entrances.

Hotel Pick-Up / Drop-off

A hotel pick-up / drop-off facility, accessed from the Relief Road driveway via a right-in driveway is planned to meet the associated pick-up / drop-off needs of the hotel and event space. The PUDO area will be located directly adjacent to the hotel lobby, and will be directly connected to the below-grade parking areas.

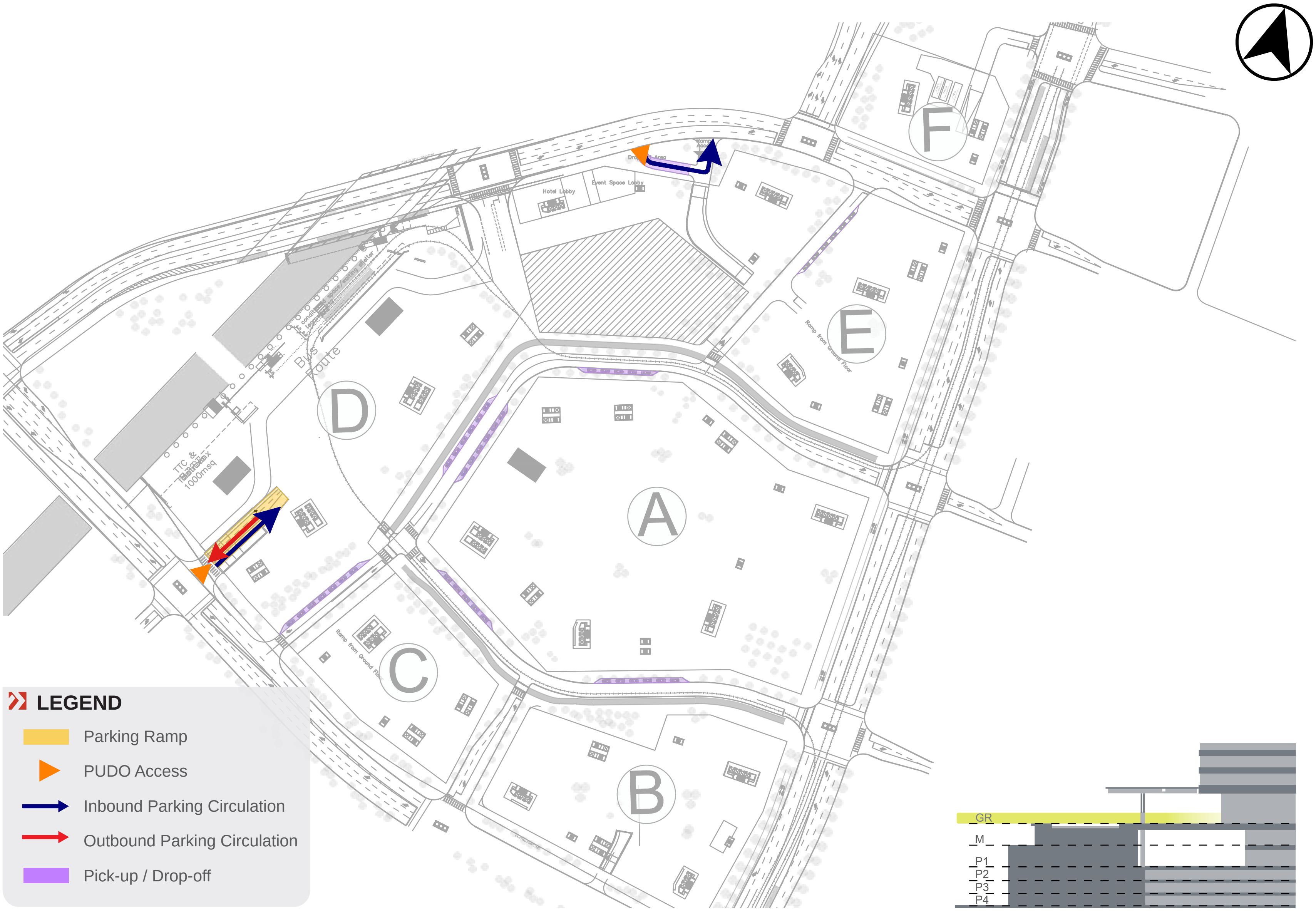


FIGURE 32A PICK-UP / DROP-OFF CONFIGURATION (GROUND LEVEL)

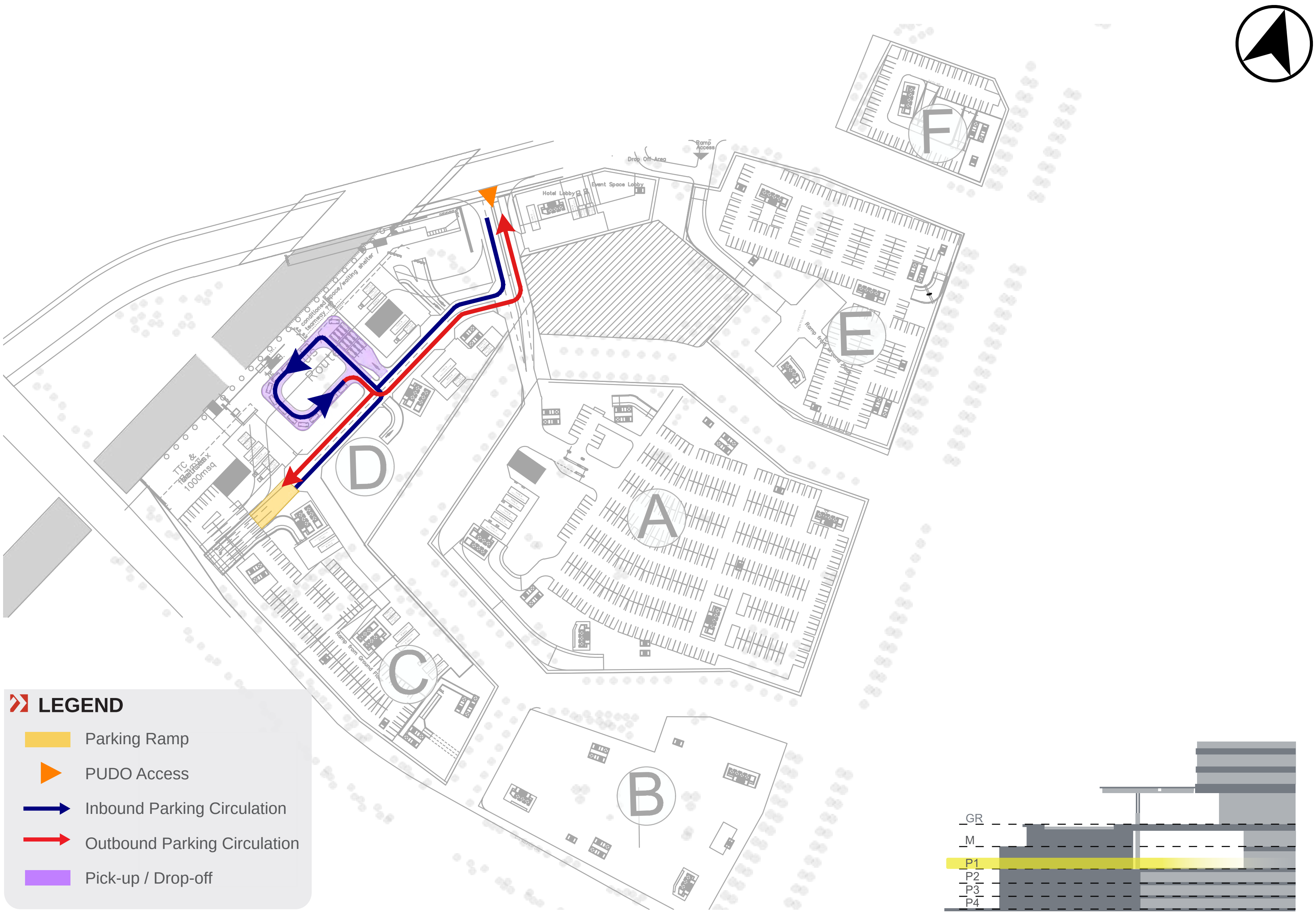


FIGURE 32B PICK-UP / DROP-OFF CONFIGURATION (P1 LEVEL)

4.3 PARKING CONFIGURATION

The Master Plan includes provision of parking in a manner that supports the proposed development but responds to the sustainable transportation policies and City of Toronto's strategic direction towards a multi-modal city. It is intended that the parking provisions on the Site meet the projected demands of the Site, but is appropriate for a mixed-use community and supports transit-oriented development.

4.3.1 Parking Access

Access to the main underground parking area is strategically limited to the perimeter of the Master Plan. Access is consolidated at a series of key, well designed facilities that avoids the proliferation of ramps, typical in conventional developments where each development block is considered individually.

The design of the vehicular systems within the Master Plan capitalises on the single ownership of the 2150 Lake Shore Boulevard Site by consolidating access across multiple blocks and buildings to minimise the intrusion of higher traffic activity at-grade within the heart of the Master Plan. This comprehensive approach to planning enables the creation of an excellence in the public realm at street level.

Access to the main underground parking area (Blocks A to E) will be provided via five (5) driveways: signalised driveways on the Relief Road and Park Lawn Road, right-in / right-out driveways on the Relief Road and Park Lawn Road, and one driveway on the east private street. The number of garage accesses will also add a layer of redundancy for access into the underground parking garage. A signalised driveway access at Brooker's Lane / Lake Shore Boulevard will provide access to the underground parking garage beneath Block F.

4.3.2 Below-Grade Inter-Block Connections

The below grade parking facilities will be located beneath the development parcels and outside of the public road network and proposed public park. To achieve the level of consolidation sought, a number of below-grade tunnel connection at strategic locations are required beneath the public streets.

These tunnels will be strategically placed to facilitate a well defined inter-garage circulation loop that will allow vehicles to travel within all areas of the underground garage, effectively distributing and balancing the traffic within the both the garage and onto the adjacent road network. A well defined vehicle circulation pattern will also help facilitate search patterns within the non-residential portion of the garage and minimise vehicle conflict at drive aisle intersections. These tunnel connections are proposed a P2 (76.00) level to enable sufficient depth below the surface for utilities and landscape needs, and adequate vehicle clearance and structure requirements.

4.3.3 Non-Residential Parking Strategy

Non-residential parking will be primarily located on the P2 (76.00) level within the main underground parking area (beneath Blocks A to E). A portion of the P1 level beneath Block A will also be allocated to non-residential parking. By placing non-residential parking primarily on this level, an inter-garage circulation loop can be achieved with the below-grade (76.00) “tunnel” connections under public streets.

It is intended that the non-residential parking area function as an access controlled commercial parking garage. There is potential for this general parking resource to be shared amongst the various non-residential users given that various peak demands do not necessary align temporally (e.g. office and residential visitor uses).

It is noteworthy that commuter parking is not provided on this Site.

4.3.4 Resident Parking Strategy

An appropriate resident parking supply, which recognises the evolving area and transportation context will be developed as part of the ongoing design development and planning process. It will aim to minimising the vehicle parking supply, while ensuring that the demands of the Site are met.

The Site is located directly adjacent to a new multi-modal transit hub with direct rail connections to downtown Toronto and the terminus for local streetcar and bus services. Recognizing the connections to higher order and local transit services, we have developed a preliminary parking garage layout, guided by Policy Area 3 (PA-3) standards for the purposes of preliminary planning purposes.

The ultimate parking supply should be guided by the following:

- Provincial policy that gives direct authority to municipalities to eliminate minimum parking requirements;
- The Site’s proximity to existing and future transit and cycling facilities that provide non-automobile dependant travel connections across the city;
- the range of employment, retail, retail, and residential uses on the Site which reduce the need for area residents to use / own a car for general trip making;
- an evolving and expanding menu of transportation modes which do not require reliance on privately owned vehicles;

A resident parking supply minimum with be resoled as part of the ongoing design development process, and will in part respond to the market demands and shifting travel characteristics of the neighbourhood.

A more fulsome review of residential parking standards will be discussed in the future Zoning By-Law Amendment application.

FIGURE 33A PARKING CONFIGURATION (GROUND LEVEL)

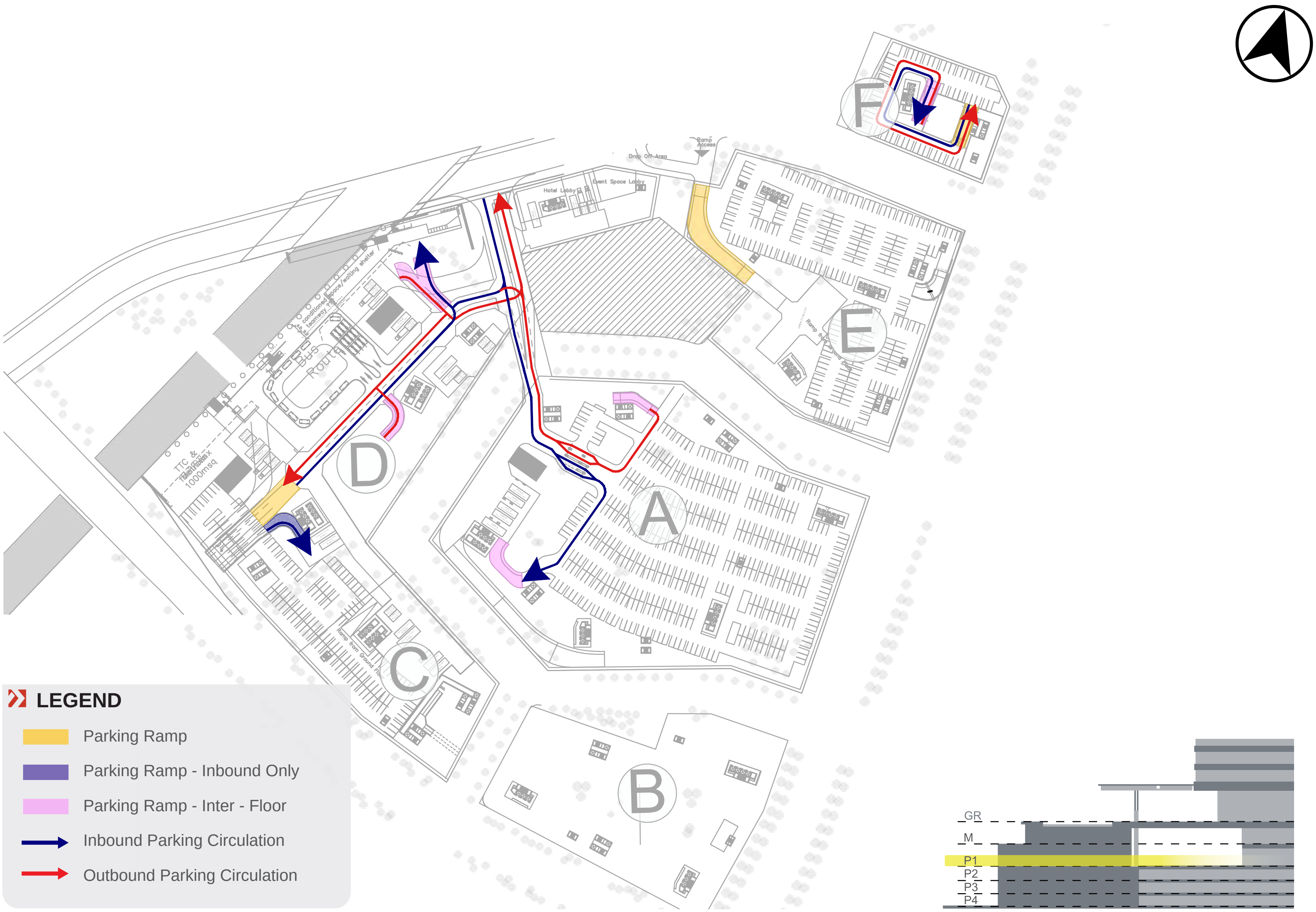


FIGURE 33B PARKING CONFIGURATION (P1 LEVEL)

FIGURE 33C PARKING CONFIGURATION (P2 LEVEL)

4.4 BICYCLE PARKING CONFIGURATION

A range of long-term, short-term bicycle parking facilities and end of trip facilities (e.g. shower & change rooms, repair stations, etc…) will be provided across the Master Plan to strategically encourage cycling as a travel mode for residents, employees, and visitors to the Site.

4.4.1 Bicycle Parking Access Strategy

Key in part to creating a cycling Master Plan community that promotes cycling as an effective mode of transportation is designing and locating bicycle parking facilities in highly visible and accessible areas of the plan as depicted in **Figure 34A** and **B.**

Long-term bicycle parking facilities / rooms are proposed to be provided generally on a mezzanine level (first level below grade) to minimise the vertical distance that cyclists need to travel within the Site. Direct connections to vertical circulation elements and building cores will be provided.

By limiting the depth at which bicycle parking is located, it opens up the opportunity for non-mechanized ways of moving the bicycle (i.e. without relying on elevators which can be limited by their capacity). Some examples of these include bicycle stairs (shallow grade stairs, with bicycle rails) and rideable bicycle ramps. Quick and easy access to these facilities will help make cycling a convenient and attractive mode of transportation.

A generous amount of short-term bicycle parking is proposed to be incorporated into the at-grade landscape design to provide for visible and highly accessible short-term bicycle parking for visitors to the Site. These will be strategically located close to building entrances and other points of interest for maximum convenience.

The location of these bicycle parking facilities will continue to be refined through the design development and planning process.

4.4.2 Bicycle Parking Supply Strategy

Bicycle parking requirements will continue to be refined through the planning process; however; Zoning By-Law 569-2013 “Bicycle Zone 1” parking rates will be used for preliminary site planning purposes. The adoption of these higher rates are conducive to the urban context of the neighbourhood and further encourages cycling as attractive mode of transportation.

4.4.3 End of Trip Bicycle Facilities

End of trip bicycle repair facilities, as well as shower and change facilities will be incorporated as part of the Master Plan. Bicycle pumps and repair tools provide cyclists a place to re-inflate tyres, tune bikes and make small repairs. These facilities, whether in a residential building, or non-residential (i.e. office / retail) bicycle parking area can help improve the reliability of cycling as a mode of transportation or recreational activity and are an effective Transportation Demand Management (TDM) measure.

The provision of shower and change facilities for employees of retail stores and offices encourage people to ride longer distances to work, and be less weather dependent. It will help attract people who are pursuing cycle commuting as a physical fitness activity. These facilities will be strategically located adjacent to long-term non-residential bicycle parking rooms.

4.4.4 Bike Share

Bike-Share Toronto stations may be incorporated into the Master Plan at street level to provide additional network coverage within the Site vicinity. Currently, the closest docking facilities are on Marine Parade Drive at Lake Shore Boulevard West. These cycling amenities will help support active transportation mobility options for the residents, employees, visitors and patrons of the Site.

4.4.5 Park Lawn GO Station Bicycle Parking

Travel demand forecasting by Metrolinx has previously estimated 10,000 trips to/from the Park Lawn GO station. This figure does not consider the potential for office-commercial and residential land-uses on the 2150 Lake Shore Boulevard Site or the local surface transit routes (streetcar, bus) that are offered at the multi-modal hub. Upwards of 15,000 daily boardings is estimated for the purposes of station bicycle parking planning. Consistent with the project modal split, a 5% cycling mode share for trips to / from the proposed Park Lawn GO station is assumed. The provision of additional, convenient and enhanced bicycle parking facilities may help increase travel to / from the station by bicycle. To help achieve this, 5% cycling mode share is assumed for travel to / from Park Lawn GO station, generating the need for a minimum of 750 bicycle parking spots. The bicycle parking provided as part of the Park Lawn GO station facility will be located within the mezzanine level (first level below grade) and can be access from the Relief Road multi-use path via a pedestrian / cycling bridge across the Relief Road, and from station accesses from Park Lawn Road and Station Square as graphically depicted in **Figure 34.**

The number of bicycle parking spaces provided as part of the station facility will continue to be refined through the design development and planning process.

FIGURE 34A PARK LAWN GO STATION BICYCLE PARKING CONFIGURATION

FIGURE 34B BICYCLE PARKING CONFIGURATION – GROUND FLOOR

FIGURE 34C BICYCLE PARKING CONFIGURATION – MEZZANINE LEVEL

LEGEND

Bicycle Storage

FIGURE 34D BICYCLE PARKING CONFIGURATION – P1 LEVEL

FIGURE 34E BICYCLE PARKING CONFIGURATION – P2 LEVEL

4.5 LOADING / SERVICING CONFIGURATION

The Master Plan takes a comprehensive approach to planning by integrating a below-grade interconnected servicing system to provide access across multiple blocks and buildings. A centralised below-grade servicing network is being pursued for the development to consolidate access at a series of key driveway / ramps to avoid the proliferation of ramps, typical in conventional developments where each development block is considered individually. This helps to minimise the intrusion of servicing and loading vehicles within the heart of the Site and is central to creating an excellent at-grade public realm.

4.5.1 Servicing Access

The placement of key loading accesses on the perimeter of the plan helps avoid larger vehicles from activity travelling through the heart of the plan (e.g. along the Loop Road), opening up opportunities to better enhance the public realm at-grade.

Four loading accesses are provided along the perimeter of the Site:

- Park Lawn Road (signalised driveway)
- Relief Road (signalised driveway)
- Relief Road (unsignalised driveway)
- Lake Shore Boulevard West (signalised driveway)

The loading areas and accesses are highlighted in **Figure 35.**

The Park Lawn Road and Relief Road signalised driveway accesses will provide access to the below grade loading areas for Blocks A to D3. The ability for servicing vehicles to enter / exit via two entrances provides a level of redundancy to the areas of the Site where it is anticipated that higher levels of loading activity, associated with the retail galleria, offices, and food store, will occur.

Access to the below grade loading area for blocks D4 and E will be provided via the unsignalised driveway off the Relief Road.

Access to an at-grade loading area for Block F is provided via a signalised driveway at Brooker's Lane / Lake Shore Boulevard.

4.5.2 Below-Grade Inter-Block Connections

The loading areas will be located beneath the development parcels and outside of the public road network and proposed public park. To achieve the level of consolidation sought, a number of below-grade tunnel connection at strategic locations are required beneath the public streets to access development blocks separated from the loading accesses by public roads.

Key tunnels below public roads allow connections between Block D (where the servicing entrances from Park Lawn Road and the Relief Road are) to Block A. An additional tunnel connection under the Loop Road creates a connection between Block A and Block B. The elevation of these connections occur where sufficient depth beneath the public road can be provided for utilities and landscaping requirements.

4.5.3 Loading Space Supply Strategy

Centralised loading areas will be provided for each block, or group of master plan buildings. These loading facilities will be well located relative to building cores and vertical circulation areas. The provision of loading spaces will continue to be refined through the design development and planning process. The loading supply may also continue to evolve to address the increasing delivery needs in an increasingly car-less society, and evolving retail landscape.

For site planning purposes, loading space requirements outlined in the City of Toronto Zoning By-law 569-2013 were assumed.

FIGURE 35A LOADING / SERVICING CONFIGURATION (GROUND LEVEL)

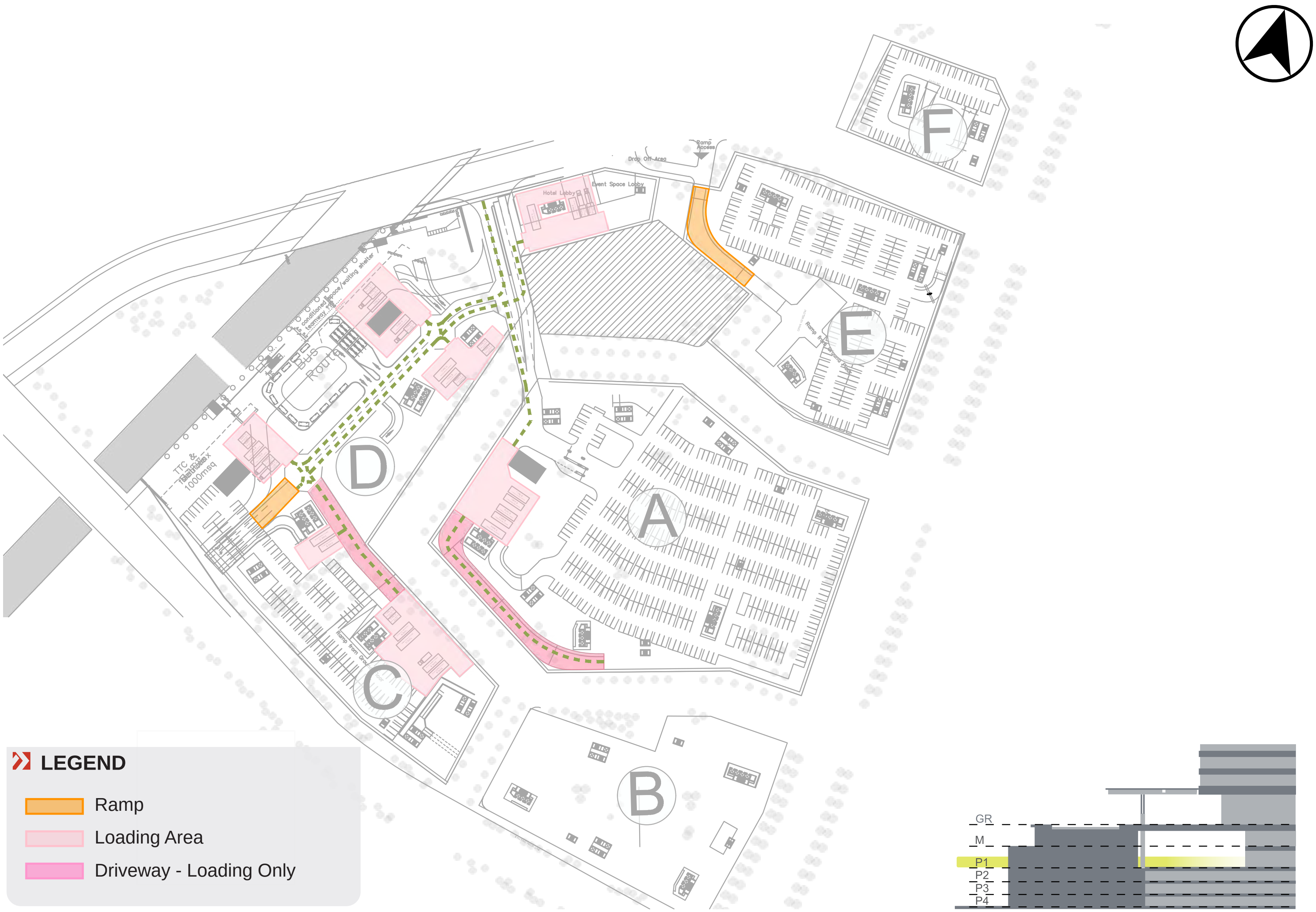


FIGURE 35B LOADING / SERVICING CONFIGURATION (P1 LEVEL)

FIGURE 35C LOADING / SERVICING CONFIGURATION (P2 LEVEL)

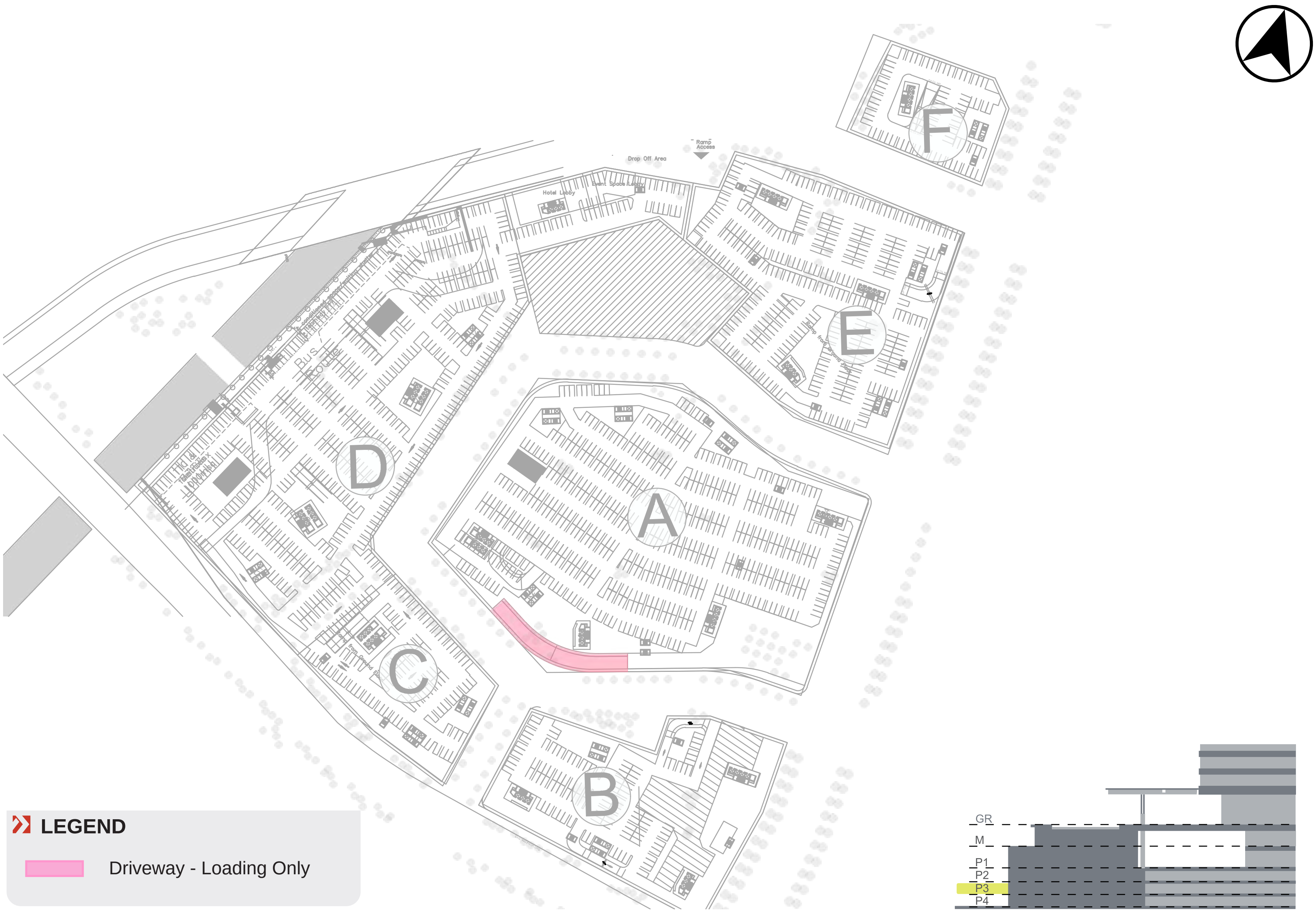
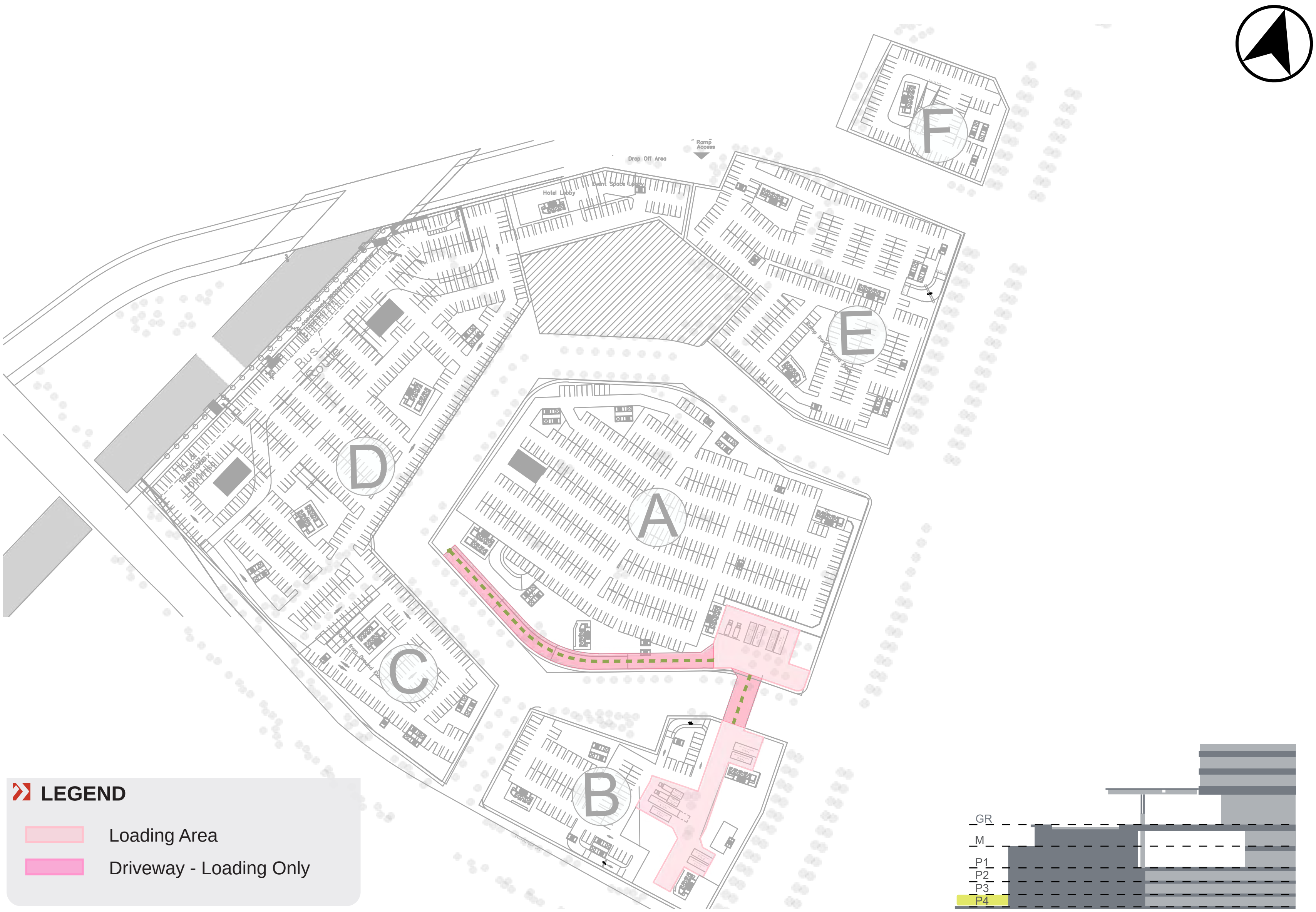


FIGURE 35D   LOADING / SERVICING CONFIGURATION (P3 LEVEL)



LEGEND

Loading Area

Driveway - Loading Only

FIGURE 35E LOADING / SERVICING CONFIGURATION (P4 LEVEL)

5.0 AREA MOBILITY ASSUMPTIONS

5.1 APPROACH

In order to project how travel patterns for the Site and the immediately surrounding area will change from existing to future conditions with the implementation of transportation infrastructure such as the Park Lawn GO station, travel distribution by mode has been reviewed by land use for the two general areas.

- **Local Area**: inclusive of both the Site and the immediate areas Humber Bay Shores and Park Lawn within TTS Zone 285; and

- **Greater Area**: inclusive of the peripheral areas that are considered to be impacted, from a mobility perspective, by the delivery of the transportation infrastructure (generally 2 to 3 kilometres from the new station).

The Local and Greater mobility areas are illustrated in **Figure 36**.

Travel distribution has been aggregated into locations of Toronto and the Greater Toronto Area (GTA) based primarily on transportation (transit) access. The distribution zones are reviewed in **Section 5.2**.

The approach taken to understand and estimate the shift in travel patterns is a review of existing distribution and mode share to and from the different GTA locations, planned transit and transportation infrastructure for the area, and estimating how this will impact travel characteristics. The changing transportation infrastructure and sample travel times are reviewed in **Section 5.3**.

For travel to particular areas of the City and Region, proxy comparisons to other comparable sites are utilized for estimation purposes.

5.1.1 Local Area

The **Local Area**, as illustrated in **Figure 36** includes Toronto Transportation Tomorrow (TTS) Zone 285, which includes the Christies Site and existing Humber Bay Shores community. The analysis considers existing populations, as well as the planned site development and other planned developments in the area, including:

- 42 Park Lawn Road
- Humber Bay Shores (balance of the planned growth)

The Local Area mobility characteristics are reviewed by primary land use proposed as part of the Site redevelopment and across the existing Humber Bay Shores community. As such, the approach taken to understand and estimate the shift in travel patterns is as follows:

- Review of existing **Residential Travel** characteristics for the Site and surrounding area, including distribution and mode share; review the transit investments with respect to travel locations and draw comparisons;

- Review of **Office / Employment Travel** characteristics for comparable sites, including distribution and mode share; review the transit investments with respect to travel locations and draw comparisons; and

- Review of **Retail Travel** characteristics for comparable sites, including distribution and mode share; review the transit investments with respect to travel locations and draw comparisons.

5.1.2 Greater Area

Introduction of the new transit hub is anticipated to have an area influence, greater than the Christies Site. In order to understand the mobility changes with the introduction of the new GO Station and transit improvements, travel patterns by location were reviewed for, generally, a 2 to 3 km area of influence of the Site and new station. The **Greater Area** includes the following refined areas and is illustrated in **Figure 36**:

- **Primary Area**
- **Secondary Area**
- **Tertiary Area**
- **Peripheral Area**

The zones have been established based primarily on existing and future transit access considerations, Toronto Travel Survey (TTS) Zones and Census Tracts.

The **Primary Area** located west / southwest of the Site includes TTS Zones 286, 287, and 288, which generally corresponds with Census Tracts 5350200.01, 5350200.02, 5350201.00, 5350202.00 and 5350209.00.

The travel characteristics of this area are influenced by the existing transit access to the Lakeshore West GO line and, along the southern boundary of the area, the TTC 501 Queen Streetcar. The Primary Area analysis considers both existing populations as well as planned future developments including:

- 2313 Lake Shore Boulevard
- Mimico 20/20 planned growth
- Mimico-Judson planned growth
- 251 Manitoba Street

The **Secondary Area** includes the primarily residential neighbourhood immediately north / northwest of the Site. This area comprises TTS Zones 301, 302, 303, 304, and 305, and generally corresponds with Census Tracts 5350215.00, 5350216.00 and 5350217.00. The Secondary Area analysis considers existing populations only. The central parts of this area are situated approximately 2 kilometres from the Mimico GO Station and existing stations along the TTC Bloor Subway Line (Line 2).

The **Tertiary Area** is located northwest of the Site and includes TTS Zones 306 and 315, which generally correspond with Census Tracts 5350218.00 and 5350219.00. The Tertiary Area analysis considers existing populations only. This area is situated closer to Bloor Street West with closer access to the Line 2 Subway.

The **Peripheral Area** is located northeast of the Site and comprises TTS Zone 122, which generally corresponds with Census Tract 5350050.01. The Peripheral Area analysis considers existing populations only. The travel characteristics of this area are influenced primarily by the 501 Queen Streetcar and the Line 2 Subway.

Similar to the site travel characteristic projections, the existing area travel patterns have been reviewed in context of existing, planned, and proposed transportation (primarily transit) investments and how increased access / service / travel times may influence mode share for the area surrounding the new station.

The change in travel distribution and mode share for each zone is then applied to project not only future Site related travel demand but also estimate the shift in area travel patterns particularly for estimating GO ridership and diversion from automobile use.

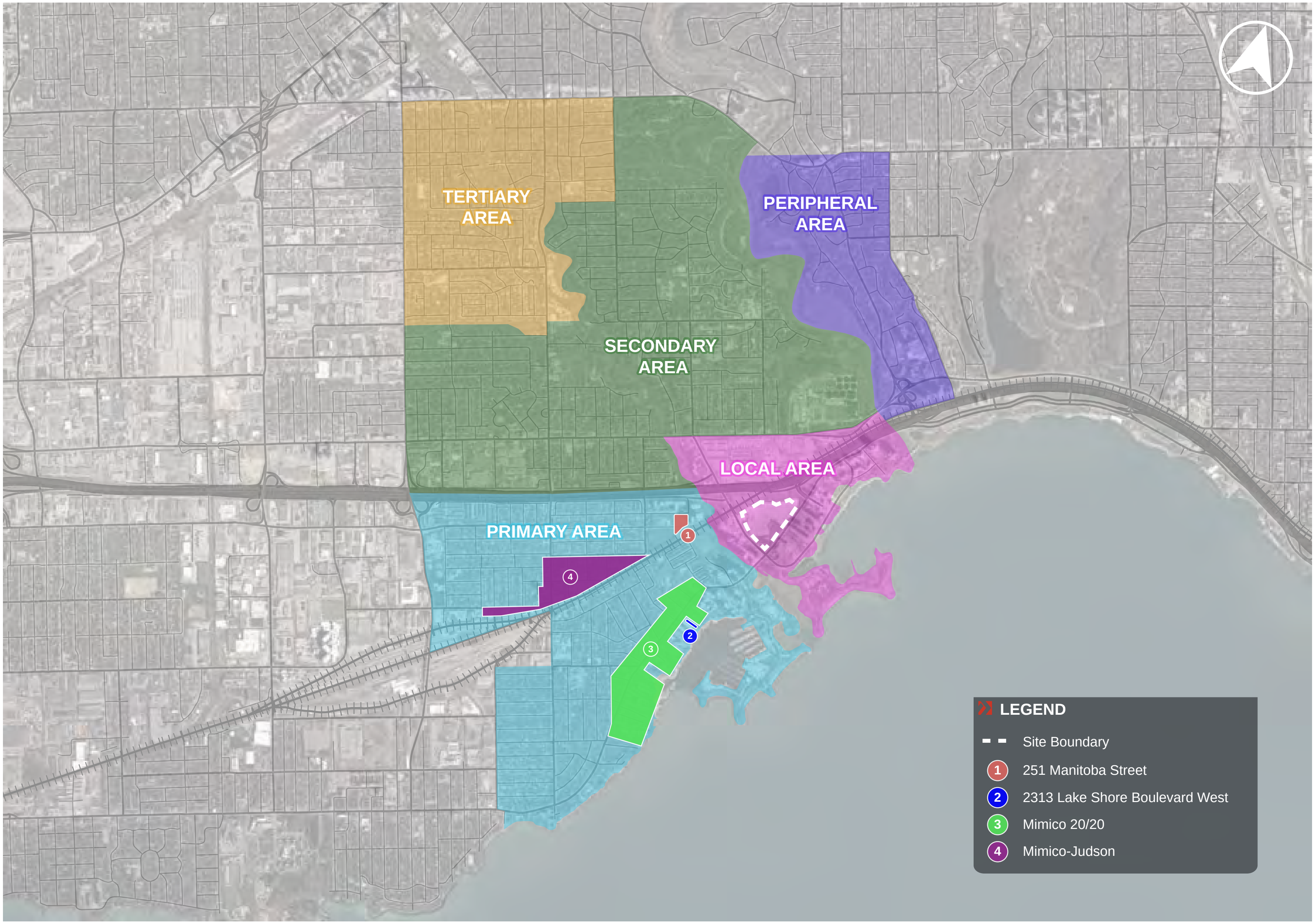


FIGURE 36A MOBILITY AREAS

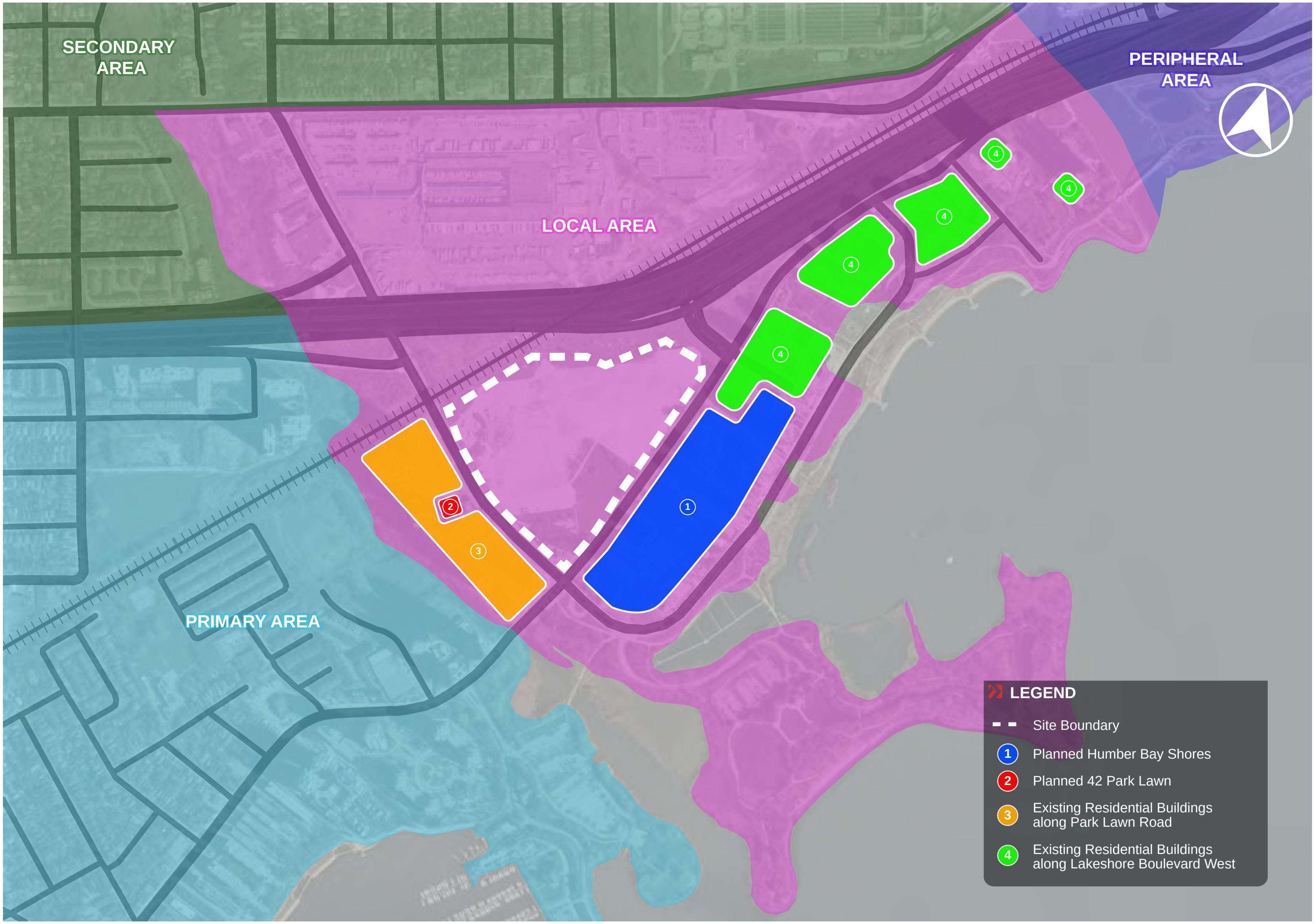


FIGURE 36B MOBILITY AREAS

5.2 TRAVEL DISTRIBUTION ZONES

For the purpose of trip distribution, a number of key travel zones were identified with respect to the Site and expected travel patterns. The distribution zones are listed and described below and are shown graphically in **Figure 37**.

Downtown Toronto Central refers generally to the areas of Toronto between the rail line just north of Dupont Street to the north, Parliament Street to the east and Bathurst Street to the west.

Downtown Toronto West refers generally to the areas of Toronto between the rail line just north of Dupont Street and Dundas Street West to the north, Bathurst Street to the east and the Humber River to the west.

Downtown Toronto East refers generally to the areas of Toronto between Don Valley Parkway and Massey Creek to the north, Victoria Park Avenue to the east and Parliament Street to the west.

Midtown Toronto refers generally to the areas of Toronto between Lawrence Avenue to the north, the rail line just north of Dupont Street to the south, Bayview Avenue to the east and the Humber River to the west.

Yonge-University Corridor refers generally to the areas of Toronto beyond the aforementioned Downtown and Midtown zones which are well serviced by the Yonge-University Subway. This generally includes the area between Steeles Avenue to the north, Lawrence Avenue to the south, Bayview Avenue to the east and the Black Creek to the west.

GTAA / West GO Corridors refers to the employment areas around Toronto Pearson Airport within Etobicoke, Mississauga and Brampton (generally between Rexdale Boulevard, Highway 427 and Queen Street to the north, Eglinton Avenue and Highway 401 to the south, Islington Avenue to the east and Highway 410 to the west), as well as areas around GO Stations on the Kitchener, Milton and Lakeshore West GO Train Lines.

South Etobicoke refers generally to the areas of Etobicoke south of Bloor Street and Dundas Street. It also generally refers to areas of Mississauga south of Highway 403.

Central Etobicoke refers generally to the areas of Etobicoke generally between Highway 401 to the north and Bloor Street and Dundas Street to the south.

Local refers to the immediate Local / Site area (i.e. TTS Zone 285).

Toronto East refers to areas of eastern Toronto which are not included in the aforementioned areas, including Scarborough.

North East refers to cities to the north and east of Toronto (east of Highway 50), including Vaughan, Richmond Hill and Markham.

North West refers to the northwest areas of Toronto and areas of other cities to the north and west of Toronto (west of Highway 50) which are not included in the aforementioned areas, including Brampton and Mississauga.

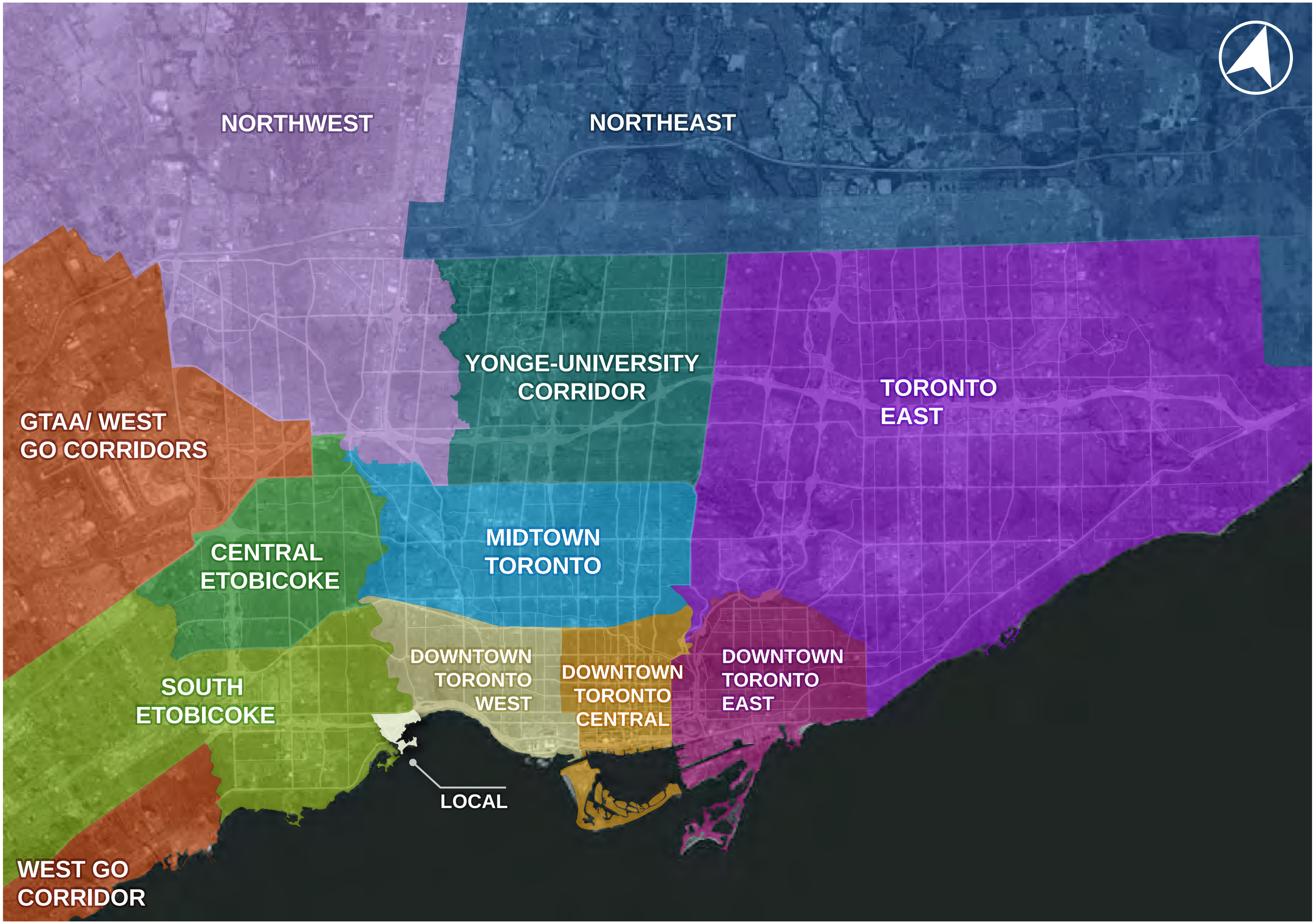


FIGURE 37 TRAVEL DISTRIBUTION ZONES

5.3 MAJOR TRANSPORTATION NETWORK CHANGES

The existing transportation context of the Site and surrounding area, as reviewed in **Section 2.0**, has the following existing major key elements:

Transit

- Lakeshore West – Mimico GO Station
- TTC 510 Queen Streetcar
- TTC Bloor Line 2 Subway
- Surface Bus Routes

Road

- Gardiner Expressway
- Lake Shore Boulevard West
- Park Lawn Road
- The Queensway

Active

- Martin Goodman Trail
- Mimico Creek Path

The future transportation context of the Site and surrounding area, as reviewed in **Section 2.0**, has the following key elements and improvements:

- Construction of a new GO Station on the Lakeshore West Line;
- Implementation of a transit hub at the new GO Station to accommodate area streetcar and bus routes;
- Waterfront Transit Reset, which proposes improvements to 501 Queen Streetcar, including construction of a new LRT right-of-way along segments of the route to the east and improvements to mixed traffic streetcar operations along other segments of the route to the west;
- Construction of a key new road connection (Relief Road), which will extend from Park Lawn Road at the Gardiner Expressway Eastbound Off Ramp to Lake Shore Boulevard West at The Marginal Boulevard, thereby alleviating pressure on Park Lawn Road and Lake Shore Boulevard West; and
- Realignment of the existing area Gardiner Eastbound On and Westbound Off Ramps to connect into the Relief Road.

It is noted that the new GO Station is expected to substantially improve travel times to various parts of the Toronto and GTA. Examples of such improvements are outlined in **Table 2**.

TABLE 2 ESTIMATED TRAVEL TIMES

To/From	Estimated Peak Hour Travel Time			Estimated Travel Time Savings
	Existing Drive	Existing Transit	Future Transit	
Union Station	40 mins	40 mins	15 mins	25 mins
St Clair Station	55 mins	50 mins	35 mins	15-20 mins
Finch Station	65 mins	70 mins	55 mins	10-15 mins
Future East Harbour Station	40 mins	75 mins	20 mins	20-55 mins
Port Credit Station	25 mins	35 mins	15 mins	10-20 mins
Pickering Station	70 mins	80 mins	60 mins	10-20 mins

The key transportation elements outlined above are highlighted in **Figure 38**. The transportation context is depicted with respect to the mobility areas and the distance to transit access.

The next sections break out the key distribution zones to discuss future distribution and mode share characteristics for travel to each zone.

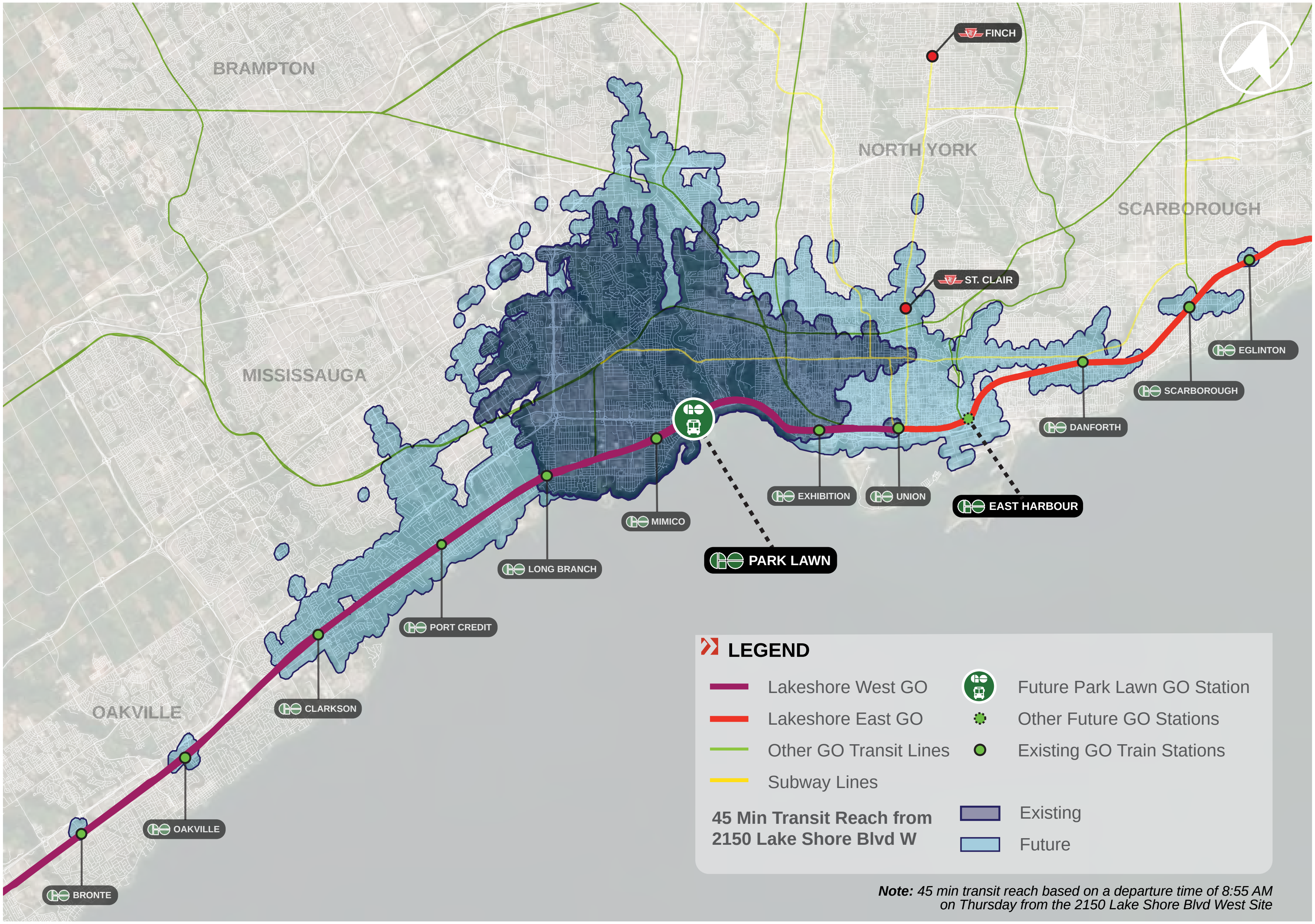


FIGURE 38 EVOLVING TRANSIT REACH / TRANSPORTATION CONTEXT

5.4 LOCAL AREA CONSIDERATIONS

5.4.1 Residential Travel

5.4.1.1 Existing Characteristics

The existing distribution by location for site residential travel is summarized in both tabular and graphical format in **Table 3** and **Figure 39**, respectively.

Given the Site-surrounding area is primarily residential (limited employment and retail uses), the residential travel characteristics generally represent all existing travel to / from the Site today.

Currently, the majority of residential trips are made either to / from downtown Toronto and south west Etobicoke. It is also noted that transit use is much higher for Toronto, compared with areas outside of Toronto, primarily due to the increased availability of transit services.

TABLE 3 EXISTING LOCAL AREA / SITE RESIDENTIAL MOBILITY PROFILE

Distribution Zone		% Dist.	Transit Local	Transit GO	Active	Auto	Passenger	PuDo
Downtown Toronto	Central	32%	56%	3%	5%	32%	3%	1%
	West	10%	14%	0%	0%	71%	12%	3%
	East	1%	44%	0%	0%	56%	0%	0%
Midtown Toronto	Midtown	7%	34%	0%	0%	41%	25%	0%
	Yonge-University	3%	21%	0%	0%	56%	23%	0%
GO Corridors	GTAA / West	12%	0%	1%	0%	92%	5%	2%
South / Central Etobicoke	South	16%	32%	0%	0%	58%	8%	2%
	Central	3%	45%	0%	0%	48%	7%	0%
Local		0%	-					
Other Areas	Toronto East	5%	0%	0%	0%	96%	4%	0%
	North East	6%	7%	0%	0%	93%	0%	0%
	North West	5%	12%	0%	0%	84%	4%	0%
	Total	**100%**	**30%**	**1%**	**2%**	**59%**	**7%**	**1%**

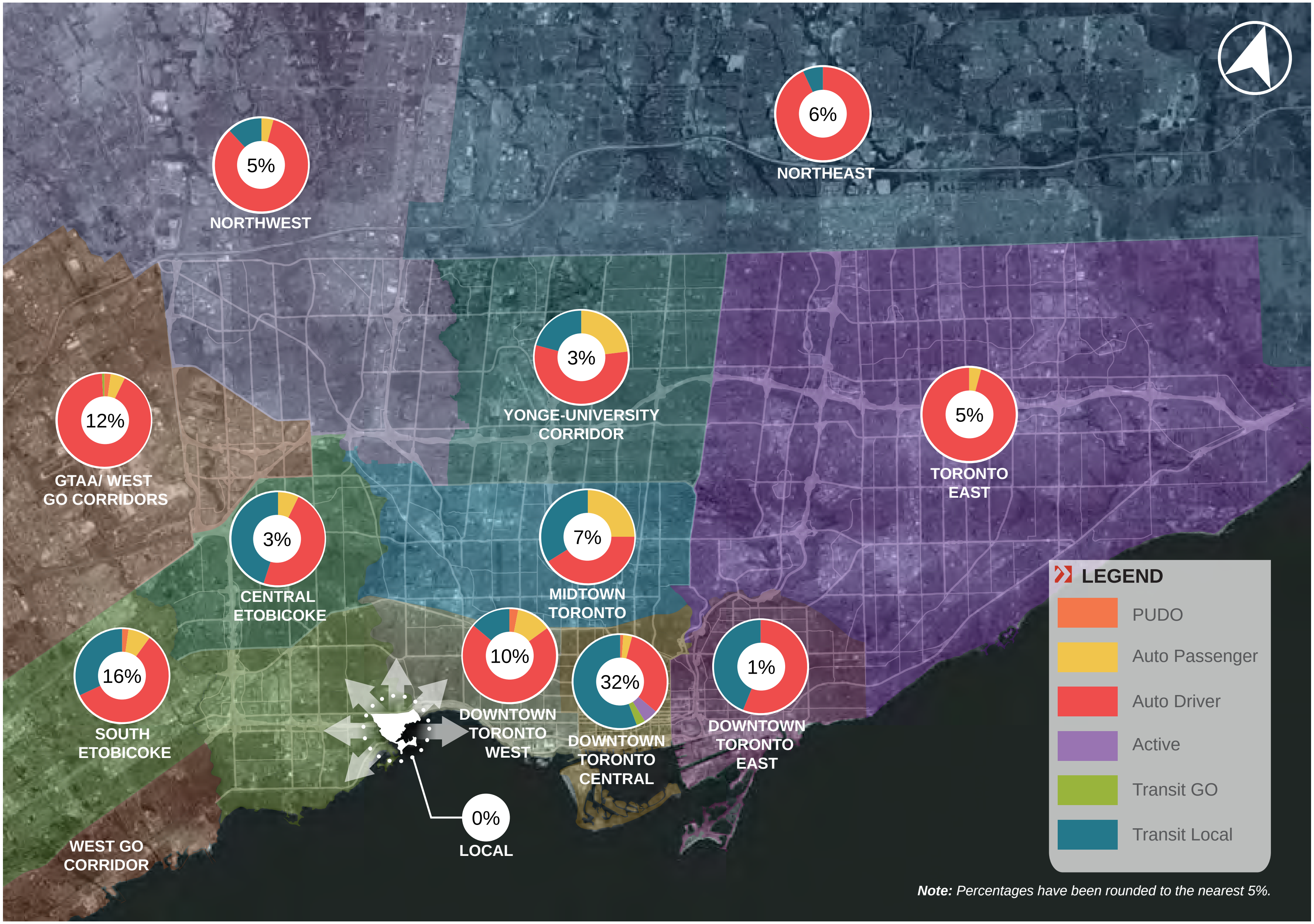


FIGURE 39 EXISTING SITE RESIDENTIAL DISTRIBUTION BY MODE

5.4.1.2 Future Characteristics

Distribution

Residential travel characteristics, which largely represent the travel characteristics of the Site area today, are anticipated to be influenced by both distribution and mode share considerations.

The existing patterns, as summarized above, will change with new transit access and strengthened connections. There will also be draws to developing areas of the city.

Downtown Toronto for purposes of this study is considered in three areas: west, central, and east.

The central area including the central business district and generally the area between Spadina and Jarvis and south of Dupont will continue to be the largest draw for homebased trips.

However with increasing development (employment, service, cultural) in west and eastern Toronto (Liberty Village and future Unilever Site) and, in particular SmartTrack and GO RER major investments (new stations in west and east), there will be more attraction to the west and east sides of the City. Increased employment in particular is expected to attract additional trips to these areas.

With the strengthening of the connections to downtown areas, it is anticipated that the excellent access will attract residents who work in downtown.

In addition to the above, given the proposed mixed use nature of the Site, a large component of trips are expected to be to and from other land uses within the Site itself (i.e. internal interaction), herein referred to as “Local Area” trips.

In estimating the future distribution of Site area residential, the existing distribution was adopted as a base, with increases primarily made to the distributions to Downtown Toronto and the Local Area and commensurate decreases primarily made to the distributions to South / Central Etobicoke and Other areas.

The adopted future distribution of residential trips was estimated based on the foregoing considerations, as well as projected travel time benefits associated with the new station as discussed in **Table 2**. Comparisons were made with proxy areas with similar access considerations (particularly to Downtown Toronto). The proxy data for the following areas is summarized in **Table 5**:

- Liberty Village
- Yonge-Eglinton
- Bloor-Dundas
- Yonge-St Clair

The existing and projected future Local Area / Site residential trip distribution is summarized in **Table 4**.

TABLE 4 LOCAL AREA / SITE RESIDENTIAL TRIP DISTRIBUTION

Distribution Zone	Existing	Projected
Downtown Toronto	43%	60%
Midtown Toronto	10%	10%
GO Corridors	12%	10%
South / Central Etobicoke	19%	5%
Local	0%	10%
Other	16%	5%
Total	**100%**	**100%**

TABLE 5 RESIDENTIAL TRIP DISTRIBUTION PROXY DATA

Destination/Origin	Bloor-Dundas	Liberty Village	Yonge-Eglinton	Yonge-St Clair
North West	4%	3%	1%	1%
West GO Corridors	3%	6%	2%	2%
Etobicoke Central	1%	1%	0%	0%
Local	6%	8%	12%	10%
Etobicoke South	5%	5%	1%	1%
Toronto East	3%	3%	13%	13%
Toronto Downtown Central	34%	52%	37%	45%
Toronto Downtown East	4%	3%	2%	4%
Toronto Downtown West	28%	7%	2%	3%
Toronto Midtown	6%	5%	13%	14%
Yonge-University Corridors	4%	3%	10%	4%
North East	2%	4%	7%	3%
Total	100%	100%	100%	100%

Mode Share

Further to the above, mode shares to and from these distribution locations are expected to change with the new transit access and strengthened connections.

In estimating the future mode shares to and from each of the distribution locations for Site area residential, the existing mode shares were adopted as a base, with changes made as considered appropriate.

The adopted future mode shares were estimated based on the foregoing new infrastructure considerations and projected travel time benefits associated with the new station as discussed in **Table 2**. Consideration was also given to the future convenience of active transportation access.

Similar to the distribution, a comparison with proxy areas with similar access considerations was also utilized in determining appropriate mode shares. The proxy areas used in estimating mode shares varied by distribution location and mode.

For example, comparisons for auto and transit mode shares to and from Downtown based distribution locations and other areas with convenient transit access were generally based primarily on proxy areas with similarly convenient transit access (GO and subway), such as:

- Yonge-Eglinton;
- Yonge-St Clair;
- Bloor-Dundas; and
- Liberty Village.

Substantial alterations were not made to auto and transit mode shares to and from Etobicoke based distribution locations and other areas further afield with less convenient transit access, albeit an allowance for Transit GO mode share for GO Transit accessible distribution locations.

In assessing the GO mode share in these instances, comparisons were primarily made against Liberty Village, noting it's proximity to the Site and location on the same GO line.

Comparisons for active mode shares were primarily made to proxy areas which were located in closer proximity to the Site area, such as:

- Mimico;
- Liberty Village;
- Bloor-Dundas; and
- Kipling.

The proxy data is summarized in **Table 7** through **Table 9**.

With respect to the "Local Area" trips, it was assumed that all trips were walking.

The overall resultant existing and projected future Local Area / Site residential mode share is summarized in **Table 6**. The detailed future mode share by location is provided in the following summary section.

TABLE 6 LOCAL AREA / SITE RESIDENTIAL MODE SHARE

Distribution Zone	Existing	Projected
Transit Local	30%	20%
Transit GO	1%	25%
Active	2%	15%
Auto Driver	59%	30%
Auto Passenger	7%	10%
Pick-Up / Drop-Off	1%	0%
Total	**100%**	**100%**

TABLE 7 RESIDENTIAL MODE SPLIT PROXY DATA

Bloor-Dundas Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	64%	2%	34%	0%	0%	0%	0%	0%	100%
West GO Corridors	78%	4%	13%	3%	2%	0%	0%	0%	100%
Etobicoke Central	82%	3%	15%	0%	0%	0%	0%	0%	100%
Local	37%	8%	10%	0%	2%	43%	0%	0%	100%
Etobicoke South	29%	7%	63%	0%	0%	0%	1%	0%	100%
Toronto East	45%	0%	55%	0%	0%	0%	0%	0%	100%
Toronto Downtown Central	12%	3%	61%	6%	16%	0%	2%	0%	100%
Toronto Downtown East	33%	0%	53%	0%	14%	0%	0%	0%	100%
Toronto Downtown West	26%	3%	30%	0%	9%	32%	0%	0%	100%
Toronto Midtown	25%	6%	55%	0%	1%	5%	8%	0%	100%
Yonge-University Corridors	14%	0%	86%	0%	0%	0%	0%	0%	100%
North East	85%	0%	15%	0%	0%	0%	0%	0%	100%
Overall Mode Split	**27%**	**3%**	**46%**	**2%**	**9%**	**12%**	**1%**	**0%**	**100%**
Kipling Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	56%	7%	37%	0%	0%	0%	0%	0%	100%
West GO Corridors	67%	12%	19%	0%	1%	1%	0%	0%	100%
Etobicoke Central	61%	5%	23%	0%	0%	11%	0%	0%	100%
Local	56%	10%	2%	0%	0%	32%	0%	0%	100%
Etobicoke South	54%	9%	26%	0%	0%	10%	1%	0%	100%
Toronto East	39%	2%	59%	0%	0%	0%	0%	0%	100%
Toronto Downtown Central	5%	3%	85%	5%	1%	1%	0%	0%	100%
Toronto Downtown East	9%	7%	84%	0%	0%	0%	0%	0%	100%
Toronto Downtown West	48%	11%	34%	0%	1%	2%	4%	0%	100%
Toronto Midtown	27%	1%	72%	0%	0%	0%	0%	0%	100%
Yonge-University Corridors	51%	0%	49%	0%	0%	0%	0%	0%	100%
North East	100%	0%	0%	0%	0%	0%	0%	0%	100%
Overall Mode Split	**42%**	**7%**	**43%**	**1%**	**1%**	**6%**	**0%**	**0%**	**100%**

TABLE 8 RESIDENTIAL MODE SPLIT PROXY DATA (CONT'D)

Liberty Village Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	94%	2%	2%	2%	0%	0%	0%	0%	100%
West GO Corridors	69%	12%	5%	5%	9%	0%	0%	0%	100%
Etobicoke Central	67%	0%	33%	0%	0%	0%	0%	0%	100%
Local	22%	0%	3%	0%	2%	69%	4%	0%	100%
Etobicoke South	64%	6%	24%	0%	6%	0%	0%	0%	100%
Toronto East	59%	12%	21%	2%	0%	0%	6%	0%	100%
Toronto Downtown Central	12%	3%	50%	2%	8%	20%	5%	0%	100%
Toronto Downtown East	37%	0%	53%	0%	0%	0%	10%	0%	100%
Toronto Downtown West	43%	10%	15%	0%	4%	27%	1%	0%	100%
Toronto Midtown	35%	3%	58%	0%	0%	0%	4%	0%	100%
Yonge-University Corridors	37%	3%	60%	0%	0%	0%	0%	0%	100%
North East	89%	0%	11%	0%	0%	0%	0%	0%	100%
Overall Mode Split	**31%**	**4%**	**37%**	**1%**	**6%**	**17%**	**4%**	**0%**	**100%**
Mimico Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	95%	2%	0%	1%	0%	0%	2%	0%	100%
West GO Corridors	83%	7%	9%	0%	0%	0%	1%	0%	100%
Etobicoke Central	67%	13%	20%	0%	0%	0%	0%	0%	100%
Local	55%	10%	1%	0%	1%	33%	0%	0%	100%
Etobicoke South	66%	10%	16%	0%	3%	4%	1%	0%	100%
Toronto East	75%	0%	14%	11%	0%	0%	0%	0%	100%
Toronto Downtown Central	35%	3%	34%	24%	3%	0%	1%	0%	100%
Toronto Downtown East	96%	0%	4%	0%	0%	0%	0%	0%	100%
Toronto Downtown West	64%	20%	13%	2%	1%	0%	0%	0%	100%
Toronto Midtown	32%	4%	61%	1%	2%	0%	0%	0%	100%
Yonge-University Corridors	39%	6%	55%	0%	0%	0%	0%	0%	100%
North East	100%	0%	0%	0%	0%	0%	0%	0%	100%
Overall Mode Split	**61%**	**7%**	**20%**	**6%**	**2%**	**4%**	**0%**	**0%**	**100%**

TABLE 9 RESIDENTIAL MODE SPLIT PROXY DATA (CONT'D)

Yonge-Eglinton Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	82%	4%	14%	0%	0%	0%	0%	0%	100%
West GO Corridors	80%	1%	12%	2%	0%	0%	5%	0%	100%
Etobicoke Central	57%	0%	43%	0%	0%	0%	0%	0%	100%
Local	8%	2%	0%	0%	2%	88%	0%	0%	100%
Etobicoke South	36%	0%	64%	0%	0%	0%	0%	0%	100%
Toronto East	55%	4%	33%	0%	3%	5%	0%	0%	100%
Toronto Downtown Central	11%	2%	81%	0%	4%	1%	1%	0%	100%
Toronto Downtown East	17%	7%	76%	0%	0%	0%	0%	0%	100%
Toronto Downtown West	31%	0%	66%	0%	3%	0%	0%	0%	100%
Toronto Midtown	31%	6%	37%	0%	4%	22%	0%	0%	100%
Yonge-University Corridors	34%	6%	57%	0%	0%	3%	0%	0%	100%
North East	71%	1%	28%	0%	0%	0%	0%	0%	100%
Overall Mode Split	**28%**	**3%**	**50%**	**0%**	**3%**	**15%**	**1%**	**0%**	**100%**
Yonge-St Clair Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	67%	13%	20%	0%	0%	0%	0%	0%	100%
West GO Corridors	83%	0%	0%	0%	0%	0%	17%	0%	100%
Etobicoke Central	-								
Local	13%	4%	2%	0%	0%	80%	1%	0%	100%
Etobicoke South	28%	0%	26%	46%	0%	0%	0%	0%	100%
Toronto East	52%	15%	28%	2%	3%	0%	0%	0%	100%
Toronto Downtown Central	15%	3%	60%	0%	6%	14%	2%	0%	100%
Toronto Downtown East	43%	13%	29%	0%	15%	0%	0%	0%	100%
Toronto Downtown West	61%	2%	33%	0%	0%	0%	4%	0%	100%
Toronto Midtown	39%	8%	28%	0%	3%	21%	1%	0%	100%
Yonge-University Corridors	36%	0%	64%	0%	0%	0%	0%	0%	100%
North East	79%	4%	17%	0%	0%	0%	0%	0%	100%
Overall Mode Split	**30%**	**6%**	**41%**	**1%**	**4%**	**17%**	**1%**	**0%**	**100%**

Summary

The projected distribution by location for Local Area / Site residential travel is summarized in both tabular and graphical format in **Table 11** and **Figure 40**, respectively.

It is noted that the overall auto mode split is generally consistent with proxy areas such as (overall mode share summarized in **Table 10**):

- Yonge-Eglinton
- Yonge-St Clair; and
- Liberty Village.

TABLE 10 PROXY AND LOCAL AREA / SITE MODE SHARE COMPARISON

Mode	Yonge-Eglinton	Yonge-St. Clair	Liberty Village	Local Area / Site
Auto Driver	28%	30%	31%	30%

Given the future context of the Site, this is considered to be appropriate.

TABLE 11 PROJECTED SITE RESIDENTIAL MOBILITY PROFILE

Distribution Zone		% Dist.	Transit Local	Transit GO	Active	Auto	Passenger	PuDo
Downtown Toronto	Central	45%	30%	45%	10%	10%	5%	0%
	West	10%	15%	20%	5%	45%	15%	0%
	East	5%	35%	40%	5%	20%	0%	0%
Midtown Toronto	Midtown	5%	35%	15%	0%	30%	20%	0%
	Yonge-University	5%	20%	20%	0%	40%	20%	0%
GO Corridors	GTAA / West	10%	0%	10%	0%	80%	5%	5%
South / Central Etobicoke	South	5%	30%	0%	15%	45%	10%	0%
	Central	0%	45%	0%	0%	50%	5%	0%
Local Areas			0%	0%	100%	0%	0%	0%
Other Areas	Toronto East	0%	0%	10%	0%	85%	5%	0%
	North East	0%	5%	0%	0%	95%	0%	0%
	North West	5%	10%	0%	0%	85%	5%	0%
	Total		**20%**	**25%**	**15%**	**30%**	**10%**	**0%**

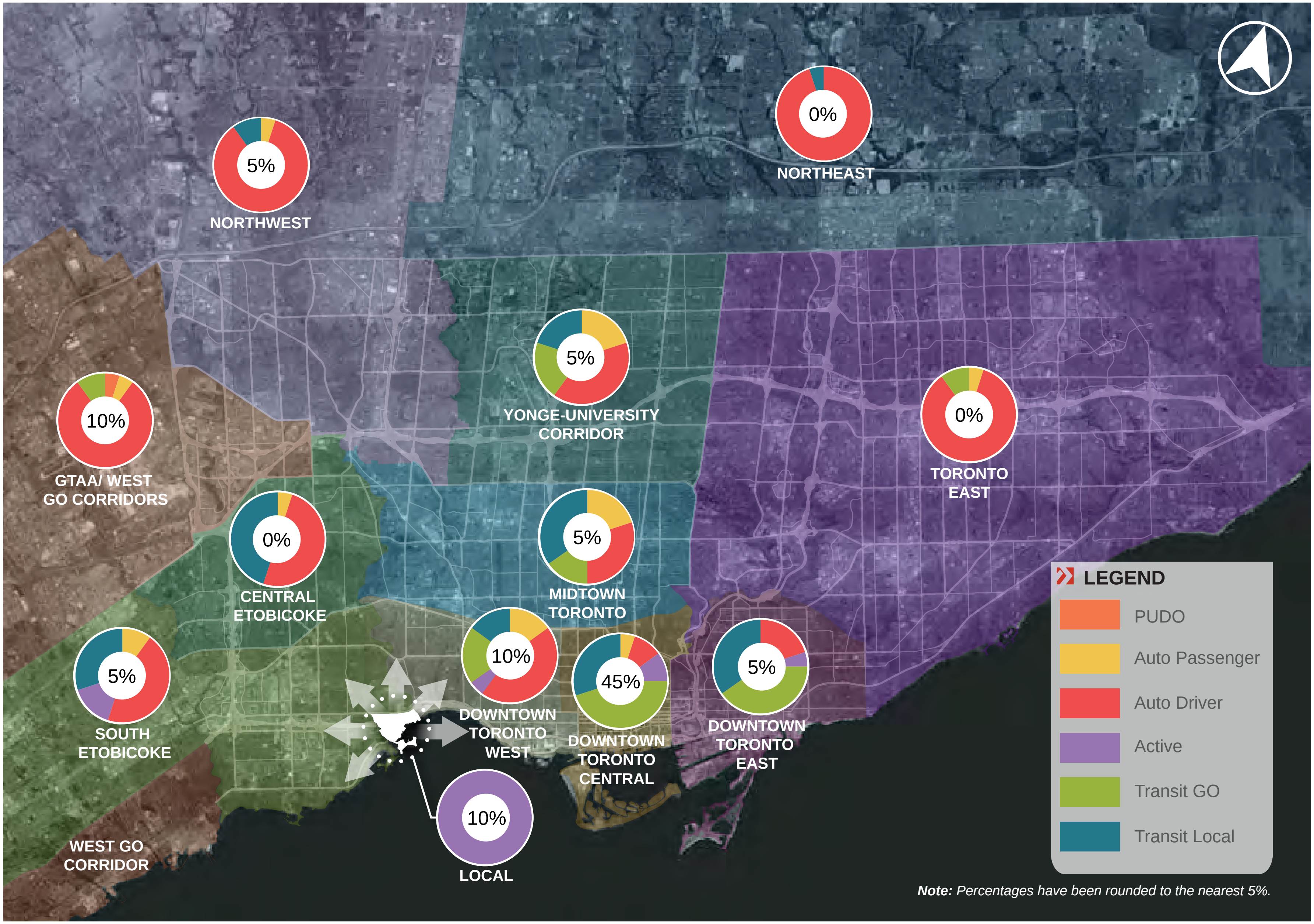


FIGURE 40 PROJECTED SITE RESIDENTIAL DISTRIBUTION BY MODE

5.4.2 Office / Employment Travel

Given the limited employment uses currently within the Local Area, there is limited existing travel characteristics to draw upon. As such, in estimating the future distribution and mode shares of Local Area / Site employment, proxy areas were reviewed and distributions and mode shares were adopted based on a combined consideration of the relevant proxy areas in each instance, as well as the future context of the Site with regards to proposed infrastructure and the mixed use nature of the Site discussed in **Section 5.4.1.1** above.

Distribution

The methodology with respect to which proxy areas were used in each instance remained generally consistent with that used in determining the residential characteristics, as outlined in **Section 5.4.1.1** above. It is noted however that due to the dispersion of employment across Toronto, in some instances, the same proxy areas as used for residential were not always available for employment.

The adopted future distribution for Downtown based areas was based primarily on proxy data for Bloor-Dundas, Liberty Village, Yonge-Eglinton and Yonge-St Clair. Beyond the Downtown based areas, the adopted future distribution was estimated based primarily on proxy data for Liberty Village and Bloor-Dundas. The projected future trip distribution is summarized in **Table 13**.

TABLE 12 OFFICE TRIP DISTRIBUTION PROXY DATA

Destination/Origin	Bloor-Dundas	Liberty Village	Yonge-Eglinton	Yonge-St Clair
North West	6%	12%	6%	5%
West GO Corridors	3%	6%	4%	5%
Etobicoke Central	1%	1%	1%	2%
Local	7%	7%	6%	4%
Etobicoke South	11%	6%	5%	4%
Toronto East	9%	9%	20%	15%
Toronto Downtown Central	6%	12%	12%	14%
Toronto Downtown East	6%	6%	6%	6%
Toronto Downtown West	23%	17%	5%	8%
Toronto Midtown	12%	11%	13%	17%
Yonge-University Corridors	10%	4%	10%	10%
North East	6%	9%	12%	10%
Total	100%	100%	100%	100%

TABLE 13 LOCAL AREA / SITE OFFICE TRIP DISTRIBUTION

Distribution Zone	Projected
Downtown Toronto	50%
Midtown Toronto	15%
GO Corridors	0%
South / Central Etobicoke	5%
Local	10%
Other	20%
Total	**100%**

Mode Share

Similar to residential, auto and transit mode shares to and from Downtown based distribution locations and other areas with convenient transit access were generally based on proxy areas such as:

- Yonge-Eglinton;
- Yonge-St Clair; and
- Liberty Village.

Auto and transit mode shares to and from Etobicoke based distribution locations and other areas further afield with less convenient transit access were primarily based on Liberty Village and Bloor-Dundas.

Active mode shares were also primarily based on Liberty Village and Bloor-Dundas. As per the residential, it was assumed that all trips to / from the "Local" were walking.

The distribution and mode share proxy data is summarized in **Table 15** and **Table 16**. The resultant projected future mode share is summarized in **Table 14**.

TABLE 14 LOCAL AREA / SITE OFFICE MODE SHARE

Mode	Projected
Transit Local	20%
Transit GO	30%
Active	20%
Auto Driver	25%
Auto Passenger	5%
Pick-Up / Drop-Off	0%
Total	**100%**

TABLE 15 OFFICE MODE SPLIT PROXY DATA

Bloor-Dundas Residential Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	87%	0%	6%	7%	0%	0%	0%	0%	100%
West GO Corridors	74%	0%	0%	26%	0%	0%	0%	0%	100%
Etobicoke Central	37%	63%	0%	0%	0%	0%	0%	0%	100%
Local	47%	0%	0%	0%	4%	49%	0%	0%	100%
Etobicoke South	68%	19%	9%	2%	2%	0%	0%	0%	100%
Toronto East	57%	5%	34%	0%	0%	0%	4%	0%	100%
Toronto Downtown Central	24%	5%	34%	0%	37%	0%	0%	0%	100%
Toronto Downtown East	0%	0%	100%	0%	0%	0%	0%	0%	100%
Toronto Downtown West	25%	3%	19%	0%	16%	33%	4%	0%	100%
Toronto Midtown	68%	4%	25%	2%	1%	0%	0%	0%	100%
Yonge-University Corridors	69%	0%	31%	0%	0%	0%	0%	0%	100%
North East	84%	0%	0%	16%	0%	0%	0%	0%	100%
Overall Mode Split	**51%**	**5%**	**23%**	**2%**	**7%**	**11%**	**1%**	**0%**	**100%**
Liberty Village Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	82%	0%	2%	16%	0%	0%	0%	0%	100%
West GO Corridors	48%	0%	0%	52%	0%	0%	0%	0%	100%
Etobicoke Central	69%	0%	31%	0%	0%	0%	0%	0%	100%
Local	15%	0%	4%	0%	3%	76%	2%	0%	100%
Etobicoke South	56%	7%	9%	23%	0%	3%	2%	0%	100%
Toronto East	49%	6%	34%	8%	3%	0%	0%	0%	100%
Toronto Downtown Central	20%	2%	58%	0%	8%	6%	6%	0%	100%
Toronto Downtown East	51%	0%	45%	1%	3%	0%	0%	0%	100%
Toronto Downtown West	27%	2%	29%	0%	12%	28%	2%	0%	100%
Toronto Midtown	44%	2%	44%	0%	10%	0%	0%	0%	100%
Yonge-University Corridors	42%	4%	54%	0%	0%	0%	0%	0%	100%
North East	61%	1%	6%	32%	0%	0%	0%	0%	100%
Overall Mode Split	**44%**	**2%**	**27%**	**10%**	**5%**	**11%**	**1%**	**0%**	**100%**

TABLE 16 OFFICE MODE SPLIT PROXY DATA (CONT'D)

Yonge-Eglinton Office Proxy									
Destination/Origin	Driver	Passenger	Local Transit	GO Transit	Cycle	Walk	Taxi / Rideshare	Other / Unknown	Total
North West	53%	1%	27%	18%	0%	0%	1%	0%	100%
West GO Corridors	39%	9%	34%	18%	0%	0%	0%	0%	100%
Etobicoke Central	39%	0%	61%	0%	0%	0%	0%	0%	100%
Local	17%	0%	1%	0%	0%	82%	0%	0%	100%
Etobicoke South	11%	0%	84%	4%	1%	0%	0%	0%	100%
Toronto East	35%	3%	60%	1%	1%	0%	0%	0%	100%
Toronto Downtown Central	13%	1%	79%	0%	2%	3%	2%	0%	100%
Toronto Downtown East	42%	4%	50%	0%	4%	0%	0%	0%	100%
Toronto Downtown West	13%	0%	85%	0%	2%	0%	0%	0%	100%
Toronto Midtown	36%	7%	36%	0%	3%	18%	0%	0%	100%
Yonge-University Corridors	39%	0%	57%	0%	2%	2%	0%	0%	100%
North East	51%	7%	38%	4%	0%	0%	0%	0%	100%
Overall Mode Split	**33%**	**3%**	**51%**	**3%**	**1%**	**8%**	**1%**	**0%**	**100%**
Yonge-St Clair Office Proxy									
Destination/Origin	**Driver**	**Passenger**	**Local Transit**	**GO Transit**	**Cycle**	**Walk**	**Taxi / Rideshare**	**Other / Unknown**	**Total**
North West	37%	2%	34%	27%	0%	0%	0%	0%	100%
West GO Corridors	42%	4%	20%	34%	0%	0%	0%	0%	100%
Etobicoke Central	15%	0%	85%	0%	0%	0%	0%	0%	100%
Local	12%	0%	4%	0%	0%	84%	0%	0%	100%
Etobicoke South	24%	0%	68%	8%	0%	0%	0%	0%	100%
Toronto East	25%	3%	66%	5%	0%	0%	1%	0%	100%
Toronto Downtown Central	13%	2%	63%	0%	12%	9%	1%	0%	100%
Toronto Downtown East	36%	4%	49%	0%	9%	0%	2%	0%	100%
Toronto Downtown West	9%	0%	65%	0%	25%	0%	1%	0%	100%
Toronto Midtown	20%	2%	54%	0%	11%	13%	0%	0%	100%
Yonge-University Corridors	25%	3%	72%	0%	0%	0%	0%	0%	100%
North East	40%	8%	41%	10%	0%	0%	1%	0%	100%
Overall Mode Split	**24%**	**3%**	**55%**	**5%**	**6%**	**7%**	**0%**	**0%**	**100%**

Summary

The projected distribution by location for Local Area / Site employment travel is summarized in both tabular and graphical format in **Table 18** and **Figure 41** , respectively.

It is noted that the overall auto mode split is generally consistent with proxy areas such as (overall mode share summarized in **Table 17**):

- Yonge-Eglinton; and
- Yonge-St Clair.

TABLE 17 PROXY AND LOCAL AREA / SITE MODE SHARE COMPARISON

Mode	Yonge-Eglinton	Yonge-St. Clair	Local Area / Site
Auto Driver	33%	24%	25%

Given the future context of the Site, this is considered to be appropriate.

TABLE 18 PROJECTED LOCAL AREA / SITE OFFICE - EMPLOYMENT MOBILITY PROFILE

Distribution Zone		% Dist.	Transit Local	Transit GO	Active	Auto	Passenger	PuDo
Downtown Toronto	Central	15%	35%	35%	10%	15%	5%	0%
	West	25%	25%	35%	20%	15%	5%	0%
	East	10%	35%	40%	10%	15%	0%	0%
Midtown Toronto	Midtown	10%	30%	45%	0%	25%	0%	0%
	Yonge-University	5%	25%	25%	0%	45%	5%	0%
GO Corridors	GTAA / West	0%	0%	60%	0%	40%	0%	0%
South / Central Etobicoke	South	5%	10%	20%	20%	40%	10%	0%
	Central	0%	50%	0%	0%	50%	0%	0%
Local Areas		10%	0%	0%	100%	0%	0%	0%
Other Areas	Toronto East	10%	20%	20%	0%	50%	10%	0%
	North East	5%	0%	40%	0%	60%	0%	0%
	North West	5%	0%	40%	0%	60%	0%	0%
	Total	**100%**	**20%**	**30%**	**20%**	**25%**	**5%**	**0%**

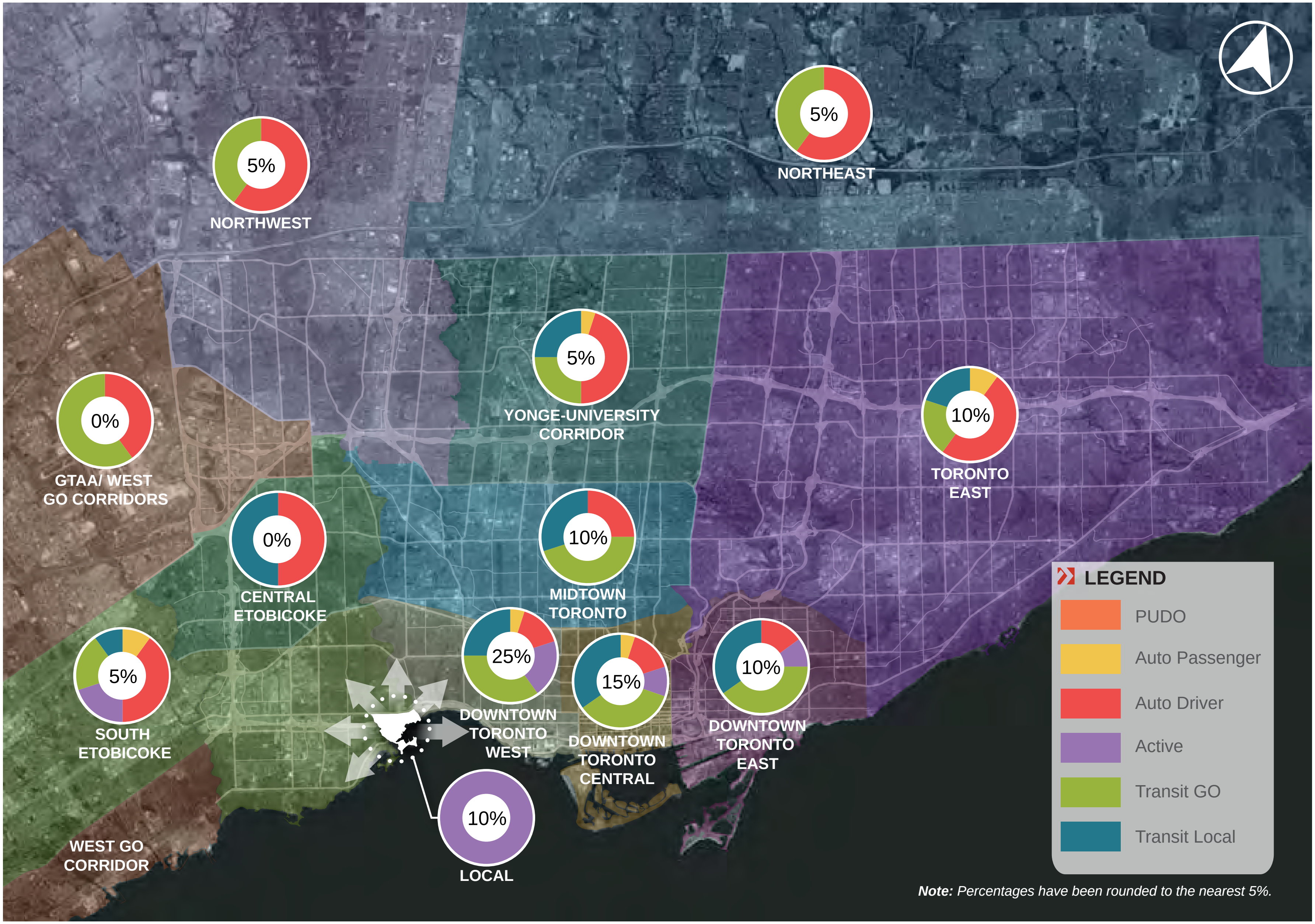


FIGURE 41 PROJECTED SITE OFFICE DISTRIBUTION BY MODE

5.4.3 Retail Travel

Distribution

Given the limited retail uses currently within the Site area, there is limited existing travel characteristics to draw upon.

Generally, the proposed retail is expected to be largely local in nature, noting that the retail as currently proposed primarily comprises food and beverage and community retail uses, with some entertainment uses and larger scale stores.

A market study has been prepared which indicatively estimates the trade areas as generally being within a 10 minute walk or a 5 minute drive of the Site, which generally concurs with the above assumption.

Given the generally local nature of the proposed retail, it is expected to first and foremost service residents and staff of the proposed development and other nearby developments within the "Local Area", particularly during weekday mornings and to a slightly lesser extent, during weekday evenings. Outside of commuter peak hours, the entertainment based uses and larger scale stores may generate more trips external to the "Local Area".

A detailed assessment of internal interactions of the retail with surrounding uses is undertaken and outlined in **Section 6.0**.

The key assumptions are the following:

- 90% of retail-based trips during the AM peak hour will be to/from the "Local Area";
- 75% of retail-based trips during the PM peak hour will be to/from the "Local Area"; and
- 50% of retail-based trips during the Saturday peak hour will be to/from the "Local Area"

The remaining trips are assumed to be to and from external areas, generally in line with the trade areas outlined in the market study.

TABLE 19 LOCAL AREA / SITE OFFICE TRIP DISTRIBUTION

Distribution Zone	Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
Local Area	90%	75%	50%
External	10%	25%	50%
Total	**100%**	**100%**	**100%**

Mode Share

It has been assumed that all trips to and from the “Local Area” are walking trips.

In relation to trips external to the “Local Area”, 2016 TTS data was sourced in relation to mode splits retail-based trips which were more than 1,000 metres in length for all of Toronto (TTS 2006 zones 1-625).

The data is summarized in **Table 20.**

On the basis of this data, the adopted future retail mode split for trips external to the “Local Area” is summarized in **Table 21**.

The adopted mode split is generally consistent with the data in **Table 22,** with the exception of a slight increase to active trips to account for the substantial density located west of Park Lawn Road which is still in close proximity to the Site, but outside of the immediate “Local Area”.

TABLE 20 RETAIL MODE SPLIT FOR TRIP LENGTH OF MORE THAN 1,000 METRES

Mode	Mode Split
Transit	16%
Active	4%
Auto	62%
Passenger	17%
PuDo	1%
Total	**100%**

TABLE 21 ADOPTED FUTURE RETAIL MODE SPLIT FOR EXTERNAL TRIPS

Mode	Projected
Transit Local	15%
Transit GO	5%
Active	10%
Auto	55%
Passenger	15%
PuDo	0%
Total	**100%**

Summary

The overall mode split derived by combining the "Local Area" and external to the "Local Area" distributions and their respective mode splits is provided in **Table 22**, whilst a graphical summary is provided in **Figure 42**.

It is noted that the overall mode split varies between the peak hours due to the differing distributions. For reference, the key assumptions provided in Table 19 above, are reiterated as follows:

- 90% of retail-based trips during the AM peak hour will be to/from the "Local Area";
- 75% of retail-based trips during the PM peak hour will be to/from the "Local Area"; and
- 50% of retail-based trips during the Saturday peak hour will be to/from the "Local Area"

Where all trips to and from the "Local Area" are walking trips. Retail trips made external to the Site are assumed to have the mode share summarized in **Table 21**.

TABLE 22 ADOPTED OVERALL SITE RETAIL MODE SPLIT

Mode	Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
Transit Local	1%	4%	7%
Transit GO	1%	1%	3%
Active	91%	77%	55%
Auto	6%	14%	28%
Passenger	1%	4%	7%
PuDo	0%	0%	0%
Total	**100%**	**100%**	**100%**

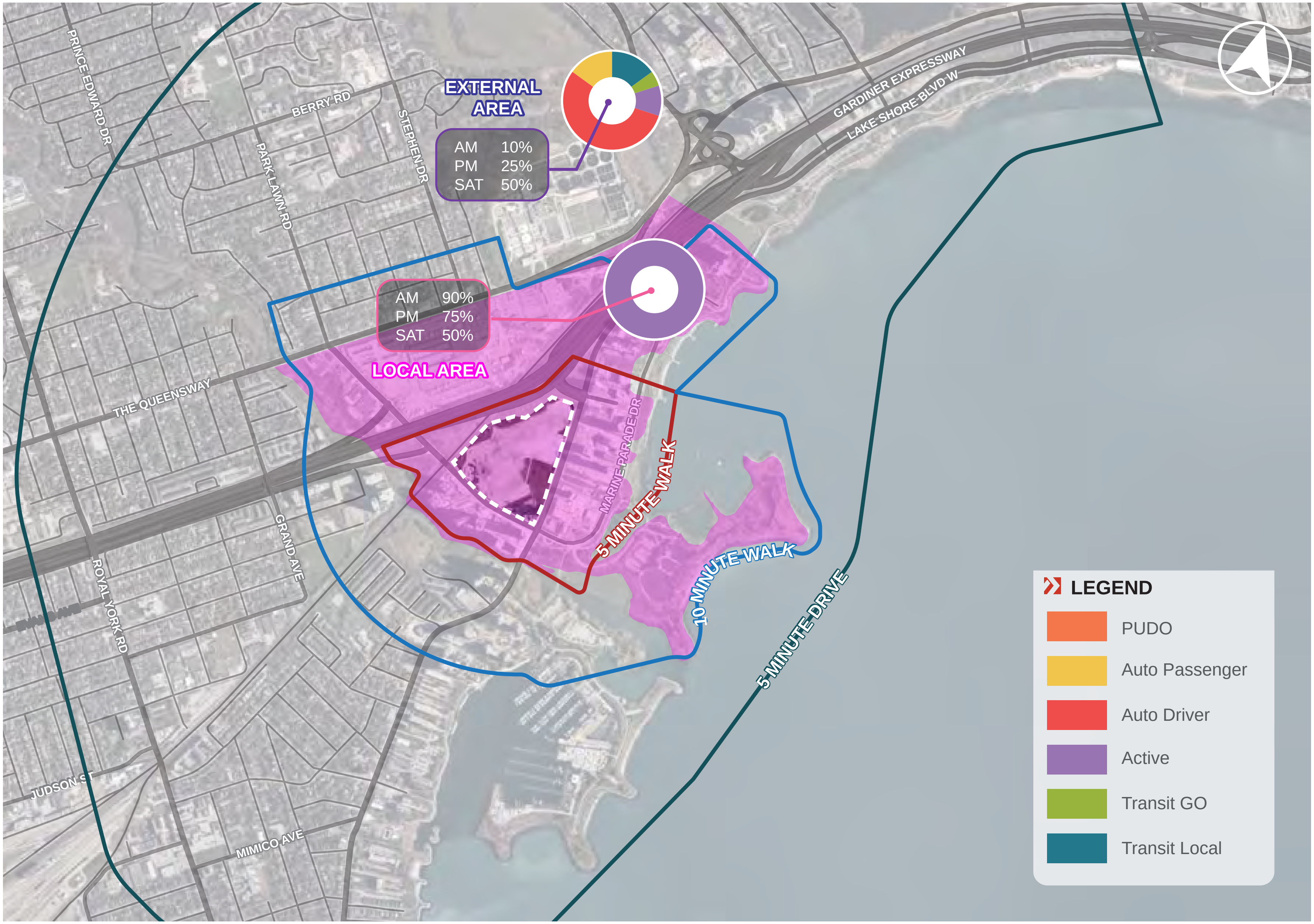


FIGURE 42 FUTURE SITE RETAIL DISTRIBUTION BY MODE

5.5 GREATER AREA CONSIDERATIONS

5.5.1 Existing Residential Characteristics

The existing distribution by location for all trips to / from the primary, secondary, tertiary and peripheral areas is summarized in **Table 25.**

Distribution

The data indicates a similar level of distribution to downtown Toronto for the primary, secondary and tertiary areas, with a much higher distribution to downtown Toronto for the peripheral area, noting its closer proximity to the downtown area.

Mode Share

Existing GO transit usage is observed in the primary area and the secondary due to the existing Mimico Station, whilst minimal existing GO transit usage is observed in the tertiary and peripheral areas.

Local transit usage for the secondary, tertiary and peripheral areas are also notable, given the proximity to the TTC Line 2 subway.

Generally, auto mode splits are similar to the local Site area, although the proximity of the TTC Line 2 subway to the secondary, tertiary and peripheral areas result in some lower auto mode splits to and from downtown and midtown based locations in particular.

TABLE 23 OVERALL EXISTING GREATER AREA TRIP DISTRIBUTION

Distribution Zone	Primary	Secondary	Tertiary	Peripheral
Downtown Toronto	36%	36%	34%	62%
Midtown Toronto	6%	7%	8%	3%
GO Corridors	11%	9%	6%	12%
South/Central Etobicoke	35%	38%	43%	12%
Other	12%	10%	9%	11%
Total	**100%**	**100%**	**100%**	**100%**

TABLE 24 OVERALL EXISTING GREATER AREA MODE SPLIT

Mode	Primary	Secondary	Tertiary	Peripheral
Transit Local	21%	33%	29%	32%
Transit GO	6%	3%	0%	0%
Active	7%	6%	15%	12%
Auto	59%	51%	48%	47%
Passenger	7%	7%	8%	9%
PuDo	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**

TABLE 25 EXISTING GREATER AREA MOBILITY PROFILE (ALL TRIPS)

Origin / Dest	Primary Area	Secondary Area	Tertiary Area	Peripheral Area
Downtown Toronto	**Distribution: 36%** *Transit Local: 33%* *Transit GO: 16%* *Active: 2%* *Auto: 42%* *Passenger: 6%* *PUDO: 1%*	**Distribution: 36%** *Transit Local: 53%* *Transit GO: 8%* *Active: 3%* *Auto: 34%* *Passenger: 2%* *PUDO: 0%*	**Distribution: 34%** *Transit Local: 58%* *Transit GO: 0%* *Active: 3%* *Auto: 35%* *Passenger: 4%* *PUDO: 0%*	**Distribution: 62%** *Transit Local: 43%* *Transit GO: 0%* *Active: 17%* *Auto: 32%* *Passenger: 8%* *PUDO: 0%*
Midtown Toronto	**Distribution: 6%** *Transit Local: 52%* *Transit GO: 1%* *Active: 1%* *Auto: 43%* *Passenger: 3%* *PUDO: 0%*	**Distribution: 7%** *Transit Local: 69%* *Transit GO: 0%* *Active: 0%* *Auto: 30%* *Passenger: 1%* *PUDO: 0%*	**Distribution: 8%** *Transit Local: 49%* *Transit GO: 0%* *Active: 0%* *Auto: 48%* *Passenger: 3%* *PUDO: 0%*	**Distribution: 3%** *Transit Local: 43%* *Transit GO: 0%* *Active: 0%* *Auto: 41%* *Passenger: 8%* *PUDO: 8%*
GO Corridors	**Distribution: 11%** *Transit Local: 10%* *Transit GO: 0%* *Active: 0%* *Auto: 83%* *Passenger: 6%* *PUDO: 1%*	**Distribution: 9%** *Transit Local: 8%* *Transit GO: 0%* *Active: 1%* *Auto: 86%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 6%** *Transit Local: 25%* *Transit GO: 0%* *Active: 0%* *Auto: 56%* *Passenger: 19%* *PUDO: 0%*	**Distribution: 12%** *Transit Local: 9%* *Transit GO: 1%* *Active: 0%* *Auto: 76%* *Passenger: 13%* *PUDO: 1%*
South / Central Etobicoke	**Distribution: 35%** *Transit Local: 13%* *Transit GO: 0%* *Active: 18%* *Auto: 60%* *Passenger: 9%* *PUDO: 0%*	**Distribution: 38%** *Transit Local: 18%* *Transit GO: 0%* *Active: 12%* *Auto: 56%* *Passenger: 14%* *PUDO: 0%*	**Distribution: 43%** *Transit Local: 3%* *Transit GO: 0%* *Active: 33%* *Auto: 51%* *Passenger: 13%* *PUDO: 0%*	**Distribution: 12%** *Transit Local: 24%* *Transit GO: 0%* *Active: 3%* *Auto: 60%* *Passenger: 13%* *PUDO: 0%*
Other Areas	**Distribution: 12%** *Transit Local: 6%* *Transit GO: 3%* *Active: 0%* *Auto: 89%* *Passenger: 1%* *PUDO: 1%*	**Distribution: 10%** *Transit Local: 10%* *Transit GO: 0%* *Active: 0%* *Auto: 85%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 9%** *Transit Local: 27%* *Transit GO: 0%* *Active: 0%* *Auto: 71%* *Passenger: 2%* *PUDO: 0%*	**Distribution: 11%** *Transit Local: 2%* *Transit GO: 0%* *Active: 5%* *Auto: 88%* *Passenger: 5%* *PUDO: 0%*

5.5.2 Future Characteristics

The projected future distribution by location for all trips to / from the primary, secondary, tertiary and peripheral areas is summarized in **Table 28.**

Distribution

Generally, a similar shift with respect to distribution is expected for each of these areas compared with the local Site area, due to the factors discussed above in **Section 1.1.1.1**, including increasing development in west and eastern Toronto along with SmartTrack and GO RER major investments.

Whilst these areas are not in the direct vicinity of the proposed GO station as the local Site area is, the station will still be readily accessible, particularly via local transit, pick up / drop off and bicycle.

The convenience of the GO train as a travel option in conjunction with the abovementioned increasing development and transit investments is still expected to influence travel distributions, with an increase towards Downtown Toronto expected.

TABLE 26 OVERALL FUTURE GREATER AREA TRIP DISTRIBUTION

Distribution Zone	Primary	Secondary	Tertiary	Peripheral
Downtown Toronto	45%	50%	50%	70%
Midtown Toronto	5%	10%	5%	0%
GO Corridors	5%	5%	5%	10%
South/Central Etobicoke	35%	30%	35%	10%
Other	10%	5%	5%	10%
Total	**100%**	**100%**	**100%**	**100%**

Mode Share

Similarly, mode splits to and from each of these destinations are expected to shift in a similar manner to that of the local Site area.

A notable shift towards GO transit is expected for the primary and secondary areas for Downtown Toronto in particular. The tertiary and peripheral areas are a little further removed from the proposed station, whilst subway access also remains relatively convenient for these areas. In this respect, shift towards GO transit is not expected to be as notable for these areas.

A minor increase is projected for GO transit mode to and from other areas of Toronto and the Greater Toronto Area where service is available, whilst a minor increase in active mode split is also projected.

Summary

Overall, as a result of the above, auto mode splits in the area are generally projected to decrease, whilst GO transit ridership is projected to increase. Further details on forecasting is provided in **Section 6.0.**

TABLE 27 OVERALL FUTURE GREATER AREA MODE SPLIT

Mode	Primary	Secondary	Tertiary	Peripheral
Transit Local	25%	30%	30%	30%
Transit GO	15%	20%	10%	5%
Active	10%	10%	20%	15%
Auto	45%	35%	35%	40%
Passenger	5%	5%	5%	10%
PuDo	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**

TABLE 28 FUTURE GREATER AREA MOBILITY PROFILE (ALL TRIPS)

Origin / Dest	Primary Area	Secondary Area	Tertiary Area	Peripheral Area
Downtown Toronto	**Distribution: 45%** *Transit Local: 25%* *Transit GO: 25%* *Active: 5%* *Auto: 35%* *Passenger: 10%* *PUDO: 0%*	**Distribution: 50%** *Transit Local: 30%* *Transit GO: 30%* *Active: 5%* *Auto: 35%* *Passenger: 0%* *PUDO: 0%*	**Distribution: 50%** *Transit Local: 35%* *Transit GO: 20%* *Active: 5%* *Auto: 35%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 70%** *Transit Local: 40%* *Transit GO: 5%* *Active: 15%* *Auto: 35%* *Passenger: 5%* *PUDO: 0%*
Midtown Toronto	**Distribution: 5%** *Transit Local: 50%* *Transit GO: 10%* *Active: 5%* *Auto: 30%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 10%** *Transit Local: 55%* *Transit GO: 10%* *Active: 5%* *Auto: 30%* *Passenger: 0%* *PUDO: 0%*	**Distribution: 5%** *Transit Local: 40%* *Transit GO: 10%* *Active: 5%* *Auto: 45%* *Passenger: 0%* *PUDO: 0%*	**Distribution: 0%** *Transit Local: 50%* *Transit GO: 5%* *Active: 0%* *Auto: 35%* *Passenger: 5%* *PUDO: 5%*
GO Corridors	**Distribution: 5%** *Transit Local: 10%* *Transit GO: 10%* *Active: 0%* *Auto: 75%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 5%** *Transit Local: 10%* *Transit GO: 10%* *Active: 0%* *Auto: 75%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 5%** *Transit Local: 25%* *Transit GO: 10%* *Active: 0%* *Auto: 45%* *Passenger: 20%* *PUDO: 0%*	**Distribution: 10%** *Transit Local: 10%* *Transit GO: 10%* *Active: 0%* *Auto: 65%* *Passenger: 15%* *PUDO: 0%*
South / Central Etobicoke	**Distribution: 35%** *Transit Local: 15%* *Transit GO: 0%* *Active: 10%* *Auto: 65%* *Passenger: 10%* *PUDO: 0%*	**Distribution: 30%** *Transit Local: 20%* *Transit GO: 0%* *Active: 10%* *Auto: 55%* *Passenger: 15%* *PUDO: 0%*	**Distribution: 35%** *Transit Local: 5%* *Transit GO: 0%* *Active: 25%* *Auto: 50%* *Passenger: 20%* *PUDO: 0%*	**Distribution: 10%** *Transit Local: 30%* *Transit GO: 0%* *Active: 5%* *Auto: 55%* *Passenger: 10%* *PUDO: 0%*
Other Areas	**Distribution: 10%** *Transit Local: 5%* *Transit GO: 5%* *Active: 0%* *Auto: 90%* *Passenger: 0%* *PUDO: 0%*	**Distribution: 5%** *Transit Local: 10%* *Transit GO: 5%* *Active: 0%* *Auto: 80%* *Passenger: 5%* *PUDO: 0%*	**Distribution: 5%** *Transit Local: 20%* *Transit GO: 5%* *Active: 0%* *Auto: 75%* *Passenger: 0%* *PUDO: 0%*	**Distribution: 10%** *Transit Local: 0%* *Transit GO: 5%* *Active: 0%* *Auto: 90%* *Passenger: 5%* *PUDO: 0%*

6.0 MULTI-MODAL TRAVEL DEMAND FORECASTING

6.1 APPROACH

As outlined in **Section 5.0**, given the scale and influence of the proposed Master Plan, the travel demand forecasting has been completed for the following general areas:

- **Local Area**: inclusive of both the Site and the immediate areas Humber Bay Shores and Park Lawn within TTS Zone 285; and
- **Greater Area**: inclusive of the peripheral areas that are considered to be impacted, from a mobility perspective, by the delivery of the transportation infrastructure.

For reference, the Local and Greater mobility areas are illustrated again in **Figure 43**.

More specifically, the **Local Area** forecasting includes the Christies Site and existing Humber Bay Shores community (existing population within TTS Zone 285), as well as other planned developments in the area.

Therefore, the populations internal to the Local Area are as follows:

- **Site**: proposed Master Plan development;
- **Adjacent Area Existing**: existing neighbourhoods within Humber Bay shores and Park Lawn; and
- **Adjacent Area New**: new proposed / planned developments within Humber Bay Shores and Park Lawn, as summarized in **Table 29**.

TABLE 29 LOCAL AREA BACKGROUND DEVELOPMENTS

Development	Statistics
42 Park Lawn Road	321 Residential Units
Humber Bay Shores[1]	5,272 Residential Units 23,517 m^2 Commercial / Retail
Total	**5,600 Residential Units** **23,500 m^2 Non-Residential**

Notes:
1. Development is partially constructed and occupied at the time of writing this report. Appropriate adjustments to the assignment were made to reflect this.

As the introduction of the new transit hub is anticipated to have an area influence, travel demand forecasts consider an area greater than the Christies Site (2 to 3 km of the new Park Lawn GO station).

The **Greater Area** forecasting includes the following:

- **Primary Area Existing Populations**
- **Primary Area Planned Development**
- **Secondary Area Existing Populations**
- **Tertiary Area Existing Populations**
- **Periphery Area Existing Populations**

The above areas are consistent with the areas discussed in the mobility assumptions **Section 5.0** above.

The Greater Area boundaries and considered background developments are illustrated in **Figure 43**.

The primary area background developments are also listed in **Table 30**.

TABLE 30 PRIMARY AREA BACKGROUND DEVELOPMENTS

Development	Statistics
2313 Lakes Shore Blvd	241 Residential Units
Mimico 20/20	2,574 Residential Units 9,125 m^2 Retail
Mimico-Judson	1,686 Residential Units 70,130 m^2 Office
251 Manitoba St	498 Residential Units
Total	**5,000 Residential Units** **79,500 m^2 Non-Residential**

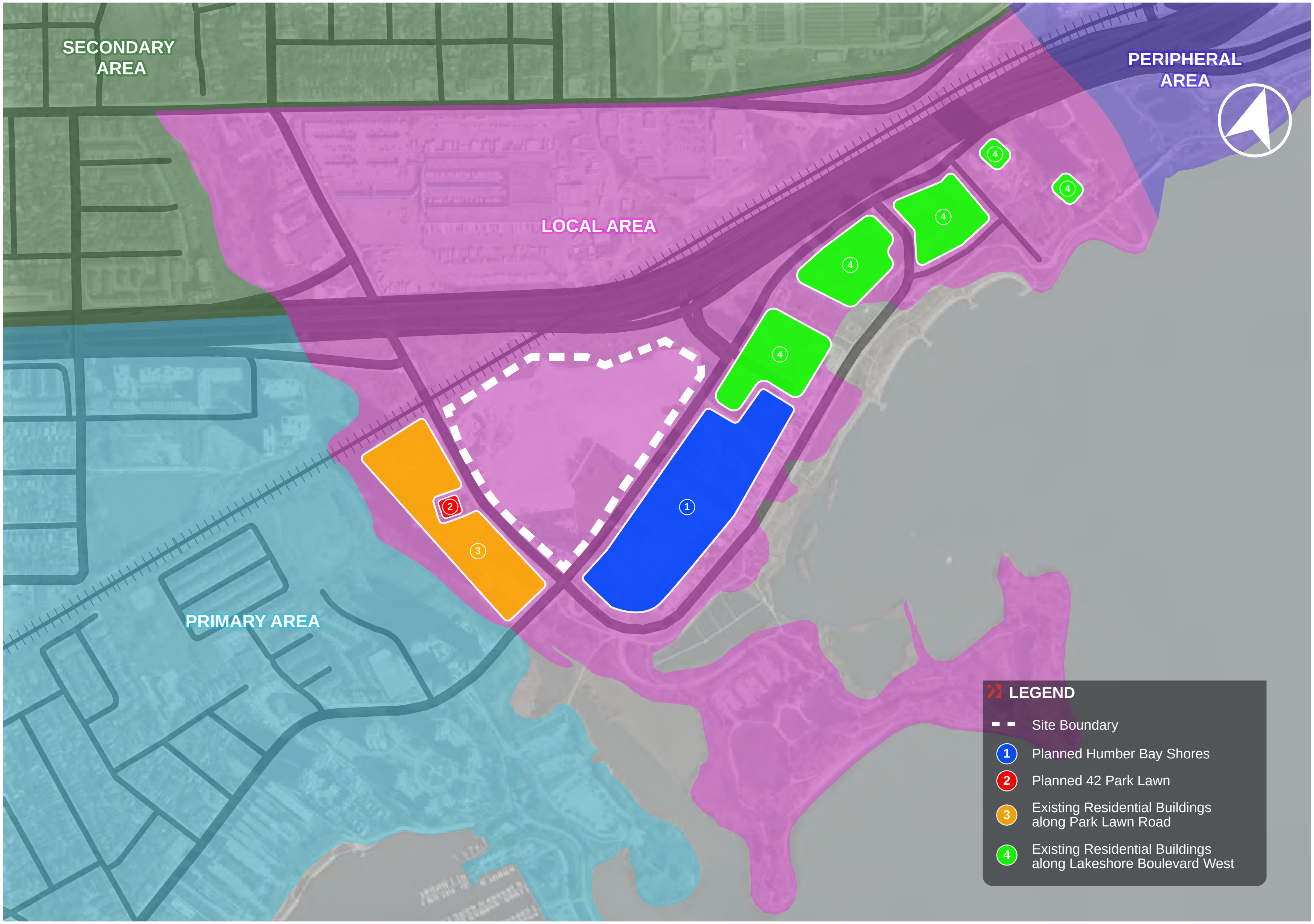


FIGURE 43 LOCAL MOBILITY AREAS

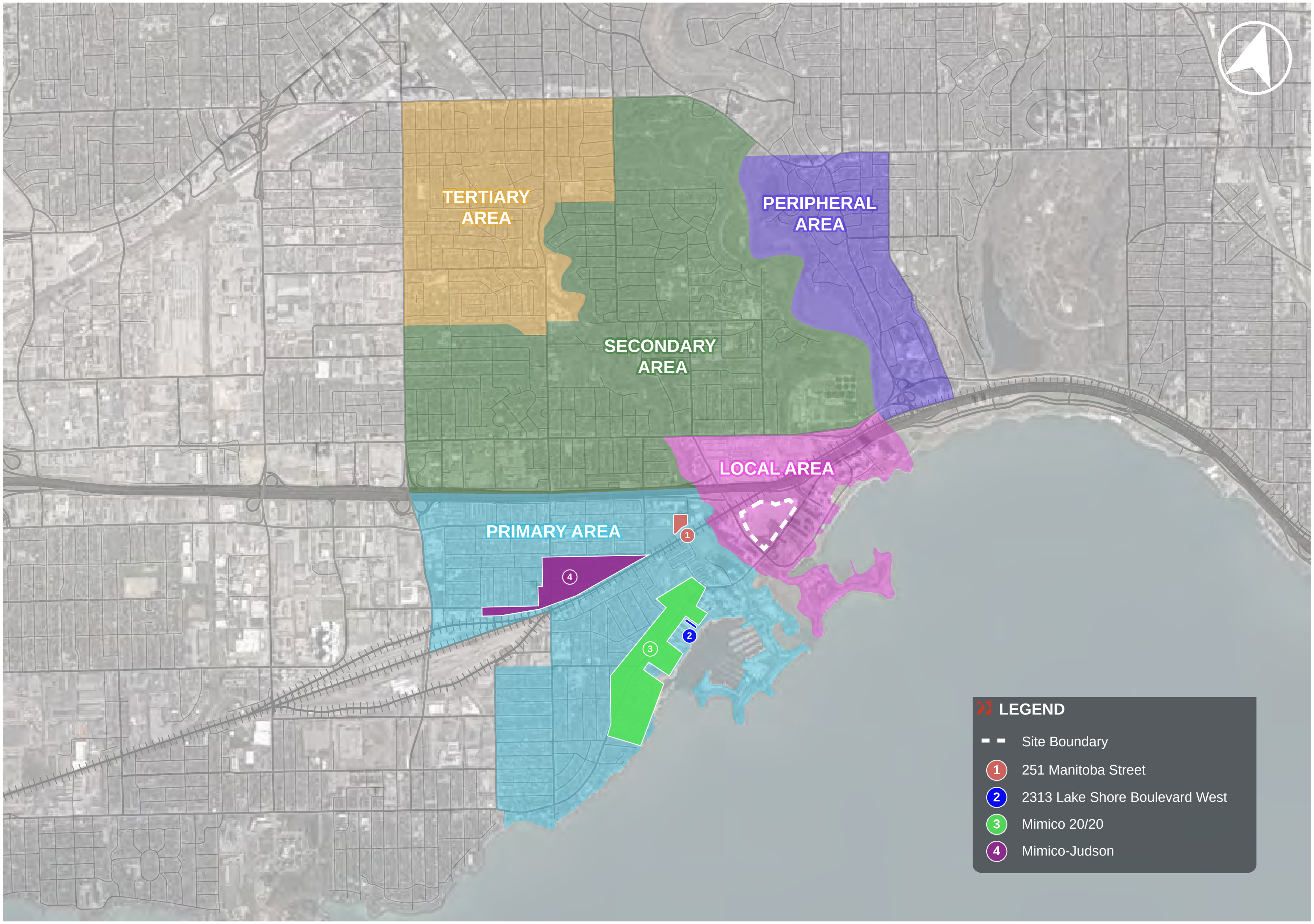


FIGURE 44 GREATER MOBILITY AREAS

6.2 LOCAL AREA TRAVEL DEMANDS

6.2.1 Forecasting Methodology

Travel demand forecasts have been developed for each of the proposed land use components (e.g. residential, office, retail and hotel) based on the following:

- **Gross Person Trip Forecasting** – Application of an adopted person trip rate derived based on a comparison of rates established from person count data from various proxy sites, first principles methodologies, and based upon ITE Trip Generation Manual 10th Edition formulations for gross person trips;

- **Interaction and Linked Considerations** – Account for interaction effects for each land use pairing based upon 2016 TTS information and interaction rates documented within the NCHRP Report 684;

- **Pass-by Considerations** – Account for pass-by rates from the ITE Trip Generation Manual 9th Edition for retail uses; and

- **Application of Mode Share Assumptions** – Application of future mode split to the resultant net person trips for each land use to determine site travel demand by mode.

The following sections discuss the steps outlined above for each of the land uses proposed for the Site.

References are made in regard to four types of trip making throughout the following sections. The terminology for these trip types is described below.

- **Gross Person Trip** – refers to all person trips to / from the proposed development, inclusive of trips both internal and external to the Site.

- **Internal Interaction Trip** – refers to trips made between the component land uses internal to the Site (i.e. origin / destination internal to the Site) and would use the internal Site network exclusively as pedestrians;

- **Linked Interaction Trip** – refers to trips made between the component land uses on the Site where the trip is an external primary trip for one trip end whereas it is of a pass-by nature for the other ancillary trip end; and

- **External Pass-by Trip** – refers to existing trips along the travel corridor, where both ends of the trip are external to the Site, that are attracted to the Site by some new land use (typically retail) provided by the proposed development while these trip makers are on route for their existing trip.

The forecasting approach structure is illustrated in **Figure 45**.

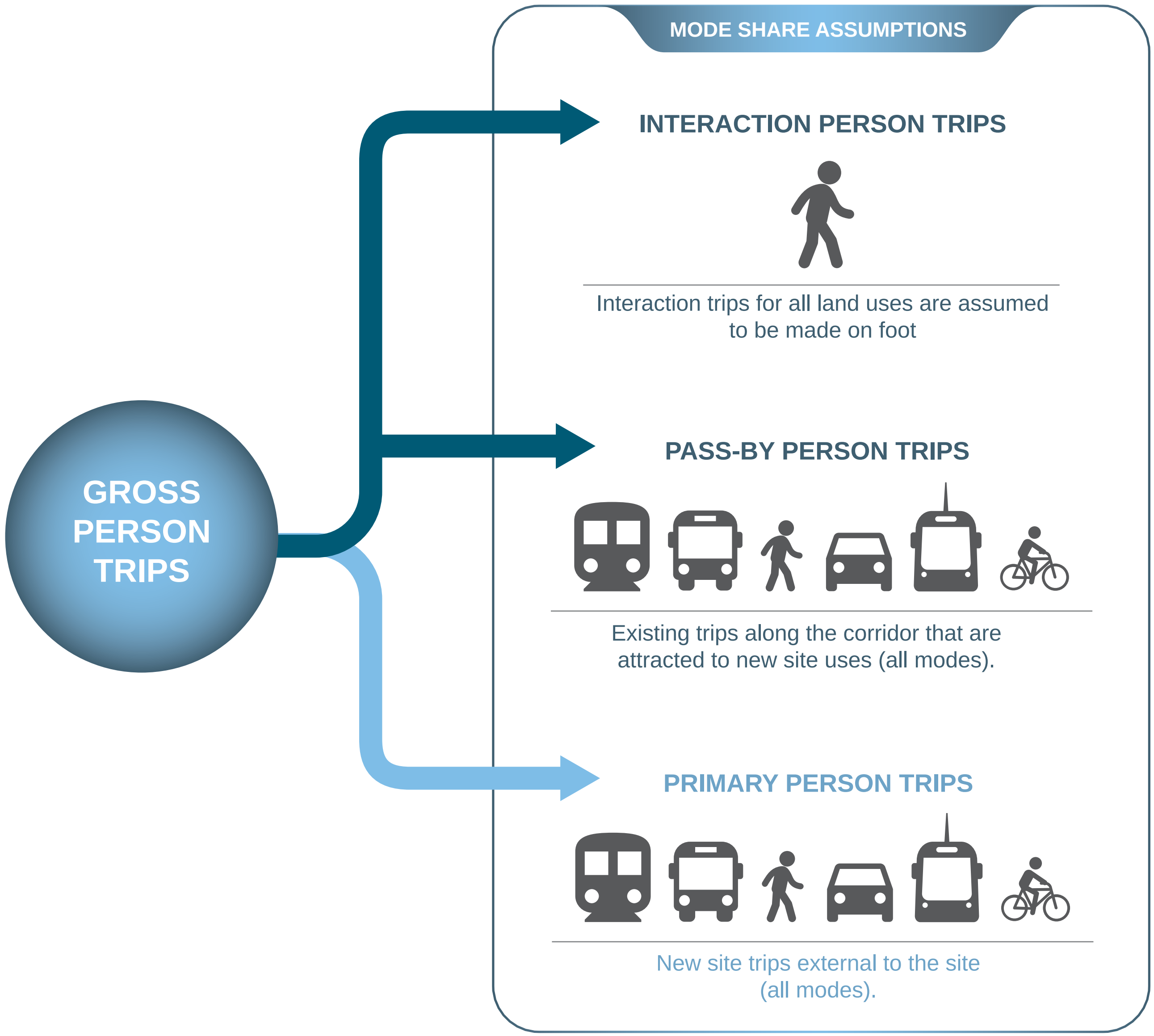


FIGURE 45   PERSON TRIP FORECASTING APPROACH STRUCTURE

6.2.2 Gross Person Trip Generation

6.2.2.1 Office Gross Person Trips

Office person trip rates were established based on a comparison between person counts at proxy developments, and ITE Trip Generation Manual 10th Edition formulations. The proxy data includes a range of urban and semi-urban contexts.

The office person trip generation rates considered as part of the review are summarized in **Table 31**.

The adopted office trip generation rate is summarized in **Table 31** and equates to **1.45**, **1.40** and **0.30** two-way person trips per 100 m^2 of office GFA during the weekday morning, afternoon and Saturday peak hours, respectively.

- **Site Office**

Application of these rates to the proposed office use of approximately 41,924 m^2 GFA results in the order of **610, 585,** and **125** two-way person trips during the weekday morning, afternoon and Saturday peak hour, respectively.

TABLE 31 GROSS OFFICE PERSON TRIPS

Methodology	Person Trip Generation Rate (trips per 100 m^2)		
	Inbound	Outbound	Two-Way
ITE LU710 General Urban / Suburban	1.36 (0.24) [0.31]	0.20 (1.37) [0.26]	1.56 (1.61) [0.57]
ITE LU710 Dense Multi-Use Urban	1.17 (0.32) [0.14]	0.18 (1.13) [0.15]	1.35 (1.45) [0.29]
ITE LU710 Centre City Core	1.16 (0.22) [0.10]	0.17 (1.14) [0.10]	1.33 (1.36) [0.20]
45 St. Clair Ave W	1.62 (0.34) [-]	0.18 (1.63) [-]	1.8 (1.97) [-]
55 St. Clair Ave W	1.88 (0.16) [-]	0.15 (1.38) [-]	2.03 (1.54) [-]
351 King St W	1.90 (0.26) [-]	0.20 (1.61) [-]	2.10 (1.87) [-]
160 Pears Ave	1.18 (0.05) [-]	0.06 (0.8) [-]	1.24 (0.85) [-]
2, 4, 6 Lansing Sq. and 2550 Victoria Park Ave (August 14, 2018)	1.19 (0.11) [-]	0.14 (0.93) [-]	1.33 (1.04) [-]
2, 4, 6 Lansing Sq. and 2550 Victoria Park Ave (August 16, 2018)	0.97 (0.10) [-]	0.14 (0.92) [-]	1.21 (1.02) [-]
Average Proxy Rate	**1.46 (0.17) [-]**	**0.15 (1.21) [-]**	**1.61 (1.38) [-]**
Adopted Rate	**1.30 (0.20) [0.15]**	**0.15 (1.20) [0.15]**	**1.45 (1.40) [0.30]**
Site Gross Person Trips *(41,924 m^2)*	**545 (80) [60]**	**65 (505) [65]**	**610 (585) [125]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

6.2.2.2 Residential Gross Person Trips

Residential person trip rates were established based on a comparison between person counts at proxy developments, by first principles using 2016 TTS data, and ITE Trip Generation Manual 10th Edition formulations. The proxy data includes a range of urban and semi-urban contexts.

The residential person trip generation rates considered as part of the review are summarized in **Table 32**.

The adopted residential trip generation rate is summarized in **Table 32** and equates to **0.50**, **0.45** and **0.45** two-way person trips per unit during the weekday morning, afternoon and Saturday peak hours, respectively.

- **Site Residential**

Application of these rates to the proposed residential development of 7,455 units results in the order of **3,720**, **3,350**, and **3,350** two-way person trips during the weekday morning, afternoon and Saturday peak hour, respectively.

- **Area Residential**

Application of these rates to the existing area residential population of approximately 6,910 units results in the order of **3,455**, **3,110** and **3,110** two-way person trips during the weekday morning, afternoon and Saturday peak hour, respectively. The new area residential development of approximately 3,450 units results in the order of **1,725**, **1,555**, and **1,555** two-way person trips during the respective peak hours.

TABLE 32 GROSS RESIDENTIAL PERSON TRIPS

Methodology	Person Trip Generation Rate (trips per unit)		
	Inbound	Outbound	Two-Way
TTS First Principles	0.01 (0.39) [-]	0.49 (0.03) [-]	0.50 (0.42) [-]
ITE LU222 Centre City Core	0.17 (0.31) [0.33]	0.49 (0.24) [0.35]	0.66 (0.55) [0.68]
325 Bogert Ave	0.16 (0.31) [-]	0.49 (0.32) [-]	0.65 (0.63) [-]
160, 170, 180,& 200 Chaulkfarm Dr	0.07 (0.37) [-]	0.55 (0.15) [-]	0.62 (0.52) [-]
60-61 Heintzman St	0.07 (0.34) [-]	0.41 (0.17) [-]	0.48 (0.51) [-]
1375 Dupont St	0.06 (0.21) [-]	0.26 (0.06) [-]	0.32 (0.27) [-]
151 & 181 Village Green Sq	0.04 (0.21) [-]	0.35 (0.11) [-]	0.39 (0.32) [-]
1638 Bloor St W	0.08 (0.31) [-]	0.51 (0.06) [-]	0.59 (0.37) [-]
224 King St W	0.05 (0.26) [-]	0.38 (0.14) [-]	0.43 (0.40) [-]
60 John St	0.06 (0.39) [-]	0.51 (0.14) [-]	0.57 (0.53) [-]
295 Adelaide St W	0.05 (0.27) [-]	0.43 (0.12) [-]	0.48 (0.39) [-]
111 St. Clair Ave W	0.14 (0.34) [-]	0.56 (0.18) [-]	0.70 (0.52) [-]
Average Proxy Rate	**0.08 (0.30) [-]**	**0.45 (0.14) [-]**	**0.53 (0.44) [-]**
Adopted Rate	**0.10 (0.30) [0.20]**	**0.40 (0.15) [0.25]**	**0.50 (0.45) [0.45]**
Site Gross Person Trips *(7,455 units)*	**740 (2,235) [1,490]**	**2,980 (1,115) [1,860]**	**3,720 (3,350) [3,350]**
Area Existing Gross Person Trips *(6910 units)*	**690 (2,075) [1,380]**	**2,765 (1,035) [1,730]**	**3,455 (3,110) [3,110]**
Area New Gross Person Trips *(3450 units)*	**345 (1,035) [690]**	**1,380 (520) [865]**	**1,725 (1,555) [1,555]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

6.2.2.3 Hotel Gross Person Trips

Hotel person trip rates were established based on a comparison between vehicle counts at proxy developments and ITE Trip Generation Manual 10th Edition formulations. The proxy data includes a range of urban and semi-urban contexts.

The hotel vehicle trip generation rates considered as part of the review are summarized in **Table 33**, with a mode split rate consistent with **Section 5.0** adopted to determine a person trip rate

The adopted hotel person trip generation rate is summarized in **Table 33** and equates to **1.00** two-way person trips per room during the weekday morning, afternoon and Saturday peak hours with an assumed hotel driver mode split of 30%.

- **Site Hotel**

Application of these rates to the proposed hotel use of approximately 350 rooms results in the order of **350** two-way person trips during the weekday morning, afternoon and Saturday peak hour.

TABLE 33 GROSS HOTEL PERSON TRIPS

Methodology	Vehicle Trip Generation Rate (trips per room)		
	Inbound	Outbound	Two-Way
ITE LU310 General Urban / Suburban	0.28 (0.31) [0.40]	0.19 (0.29) [0.32]	0.47 (0.60) [0.72]
Park Hyatt Toronto	0.15 (0.15) [-]	0.12 (0.14) [-]	0.27 (0.29) [-]
	0.13 (0.19) [-]	0.14 (0.19) [-]	0.27 (0.38) [-]
Le Germain Hotel	0.09 (0.16) [-]	0.08 (0.16) [-]	0.17 (0.32) [-]
	0.16 (0.15) [-]	0.13 (0.14) [-]	0.29 (0.29) [-]
Marriot Hotel, Toronto (Bay St)	0.13 (0.13) [-]	0.11 (0.12) [-]	0.24 (0.25) [-]
Metropolitan Hotel, Toronto	0.14 (0.07) [-]	0.11 (0.11) [-]	0.25 (0.18) [-]
Sutton Place Hotel, Toronto	0.21 (0.11) [-]	0.17 (0.17) [-]	0.38 (0.28) [-]
Holiday Inn, Toronto (3450 Dufferin St)	0.13 (0.12) [0.12]	0.19 (0.10) [0.06]	0.32 (0.22) [0.18]
	0.14 (0.12) [0.14]	0.14 (0.10) [0.24]	0.28 (0.22) [0.38]
Delta Hotel, Toronto (2035 Kennedy Rd)	0.19 (0.14) [-]	0.19 (0.19) [-]	0.38 (0.33) [-]
Average Proxy Rate	**0.15 (0.13) [0.13]**	**0.14 (0.14) [0.15]**	**0.29 (0.27) [0.28]**
Adopted Vehicle Trip Rate	**0.15 (0.15) [0.15]**	**0.15 (0.15) [0.15]**	**0.3 (0.3) [0.3]**
Adopted Person Trip Rate[2]	**0.50 (0.50) [0.50]**	**0.50 (0.50) [0.50]**	**1.00 (1.00) [1.00]**
Site Gross Person Trips *(350 Rooms)*	**175 (175) [175]**	**175 (175) [175]**	**350 (350) [350]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]
2. Based on assumed driver mode split of 30%

6.2.2.4 Retail Gross Person Trips

General retail person trip rates were established based on a comparison between person counts at proxy developments (street related and larger format general retail) and ITE Trip Generation Manual 10th Edition formulations.

A range of retail typologies were reviewed in order to adopt a rate that represents a blend of format, given the range and uncertainty surrounding the retail format. The proposed retail uses are considered to be largely ancillary in nature to the other office and residential uses, and will primarily serve the Site and adjacent community (e.g. not destination retail). This is reflected in the mode share considerations in the assignment of retail related travel demands. However, a range of rates were considered in selection of the adopted rate.

The retail person trip generation rates considered as part of the review are summarized in **Table 34**.

The adopted retail rated are summarized in **Table 34** and equate to **5.00**, **12.00**, and **14.00** two-way person trips per 100 m^2 of GFA during the weekday morning, afternoon and Saturday peak hours, respectively.

- **Site Retail**

Application of these rates to the proposed retail use of approximately 42,701 square metres GFA in the order of **2,135**, **5,125**, and **5,980** two-way person trips during the weekday morning, afternoon and Saturday peak hour, respectively.

TABLE 34 GROSS RETAIL PERSON TRIPS

Methodology	Person Trip Generation Rate (trips per 100 m^2)		
	Inbound	Outbound	Two-Way
ITE LU820 General Urban / Suburban	3.09 (4.06) [-]	2.64 (4.06) [-]	5.73 (8.12) [-]
ITE LU820 Dense Multi-Use Urban	2.34 (5.78) [-]	2.16 (6.52) [-]	4.50 (12.30) [-]
Average Rate	**2.72 (4.92) [-]**	**2.40 (5.29) [-]**	**5.12 (10.21) [-]**
Street Level Retail			
Bloor-Bedford (convenience)	4.68 (10.03) [-]	3.74 (10.77) [-]	8.42 (20.80) [-]
Queen St W (clothing retail)	0.17 (6.46) [-]	0.10 (5.90) [-]	0.27 (12.36) [-]
295 Adelaide St W	0.10 (7.98) [-]	0.00 (6.29) [-]	0.10 (14.27) [-]
111 St. Clair Ave W (urban grocery, LCBO)	4.76 (9.60) [-]	4.04 (10.11) [-]	8.80 (19.71) [-]
Average Rate	**2.43 (8.52) [-]**	**1.97 (8.27) [-]**	**4.40 (16.79) [-]**
Larger Format Retail			
Promenade Mall	- (2.09) [-]	- (2.17) [-]	- (4.26) [-]
Bayview Village	- (4.75) [-]	- (4.95) [-]	- (9.70) [-]
Galleria Mall	2.18 (6.36) [-]	1.69 (5.96) [-]	3.87 (12.32) [-]
Agincourt Mall (Wal-Mart)	2.74 (4.79) [-]	1.98 (5.46) [-]	4.72 (10.25) [-]
Average Rate	**2.46 (4.50) [-]**	**1.83 (4.64) [-]**	**4.29 (9.14) [-]**
Adopted Rate	**2.75 (6.00) [7.00]**	**2.25 (6.00) [7.00]**	**5.00 (12.00) [14.00]**
Site Gross Person Trips *(42,701 m^2)*	**1,175 (2,565) [2,990]**	**960 (2,560) [2,990]**	**2,135 (5,125) [5,980]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

6.2.2.5 Summary of Gross Person Trips

The total gross person trips generated by the Local Area including the proposed Site uses and area uses (both existing and future developments) are summarized in **Table 35** and illustrated in **Figure 46.**

The gross person trips are the summary of the individual contributions from the component residential, office, and retail land uses.

- **Site Gross Trips**

Based on the above, the Site is projected to generation in the order of **6,815**, **9,410** and **9,805** two-way gross person trips during the weekday morning, afternoon and Saturday peak hour, respectively.

- **Area Gross Trips**

The adjacent area comprising existing and new residential uses in the Humber Bay Shores and Park Lawn neighbourhoods are projected to generate approximately **5,180**, **4,665** and **4,665** two-way person trips during the weekday morning, afternoon and Saturday peak hour, respectively.

TABLE 35 SUMMARY OF LOCAL AREA GROSS PERSON TRIPS

Methodology	Person Trip Generation (trips per 100 m² GFA)		
	Inbound	Outbound	Two-Way
Site			
Residential	740 (2,235) [1,490]	2,980 (1,115) [1,860]	3,720 (3,350) [3,350]
Office	545 (80) [60]	65 (505) [65]	610 (585) [125]
Retail	1,175 (2,565) [2,990]	960 (2,560) [2,990]	2,135 (5,125) [5,980]
Hotel	175 (175) [175]	175 (175) [175]	350 (350) [350]
Total	**2,635 (5,055) [4,715]**	**4,180 (4,355) [5,090]**	**6,815 (9,410) [9,805]**
Area			
Existing Residential	690 (2,075) [1,380]	2,765 (1,035) [1,730]	3,455 (3,110) [3,110]
Future Residential	345 (1,035) [690]	1,380 (520) [865]	1,725 (1,555) [1,555]
Total	**1,035 (3,110) [2,070]**	**4,145 (1,555) [2,595]**	**5,180 (4,665) [4,665]**
Local Area Total	**3,670 (8,165) [6,785]**	**8,325 (5,910) [7,685]**	**11,995 (14,075) [14,470]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

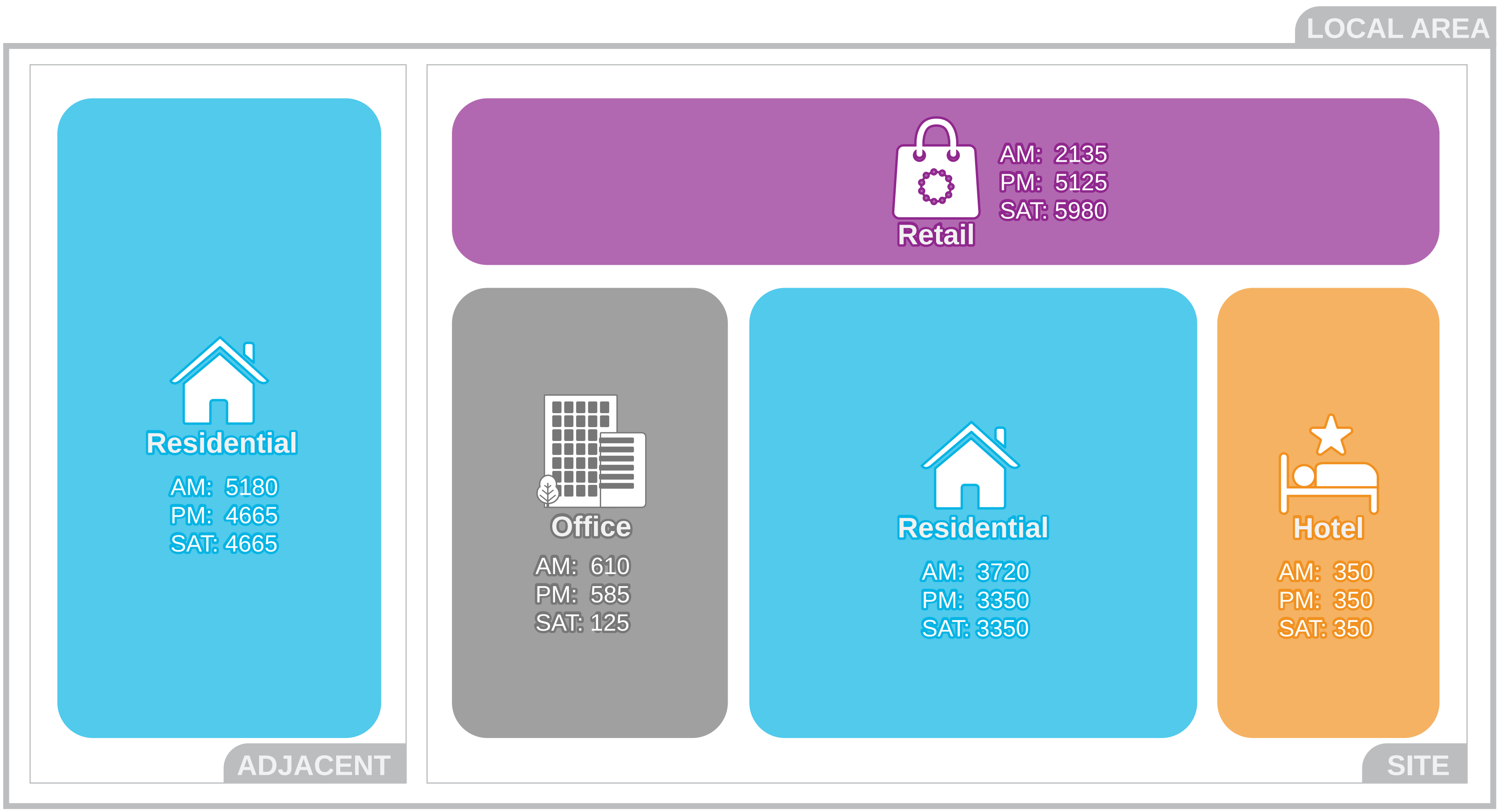


FIGURE 46 LOCAL AREA GROSS PERSON TRIPS BY LAND USE

6.2.3 Interaction Considerations

Interaction effects reflect the tendency of person trips from the different land uses proposed on Site and, in this case the adjacent neighbourhoods within the Local Area, to overlap with one another, or the synergy between land uses. The proposed Site development will have this synergy with the area uses as well given its size and mix of uses.

The interaction between uses and ability for people to travel shorter distances to shop, play, and work is important in influencing travel characteristics and the need for people to drive.

Each land use has different travel characteristics and interaction considerations. All primary uses contemplated as part of the development plan are discussed in the following. The basis of the quantum of interaction trips are based on the assumptions established in **Section 5.0**, which reflects the local trip.

Again, the Site and area residential uses are all considered as part of the synergy within the Local Area as defined at the outset of this section.

Office Interaction

The Local Area gross office person trips are re-summarized in **Table 36** for reference.

Given the lack of office uses in the local area, all office trips are attributed to the new office uses proposed as part of the Master Plan.

TABLE 36 GROSS OFFICE PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Site	545 (80) [60]	65 (505) [65]	610 (585) [125]
Total	**545 (80) [60]**	**65 (505) [65]**	**610 (585) [125]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

Based on the distribution determined in **Section 5.0**, it is projected that the Local Area will have a local distribution of approximately 10% of two-way office trips.

For the purposes of this study, it is assumed that:

- Interaction with area residential considers new developments only (assumes existing residents will continue to work where they do today, the new office uses influence new resident choice only);
- The split between Site and area residential is based on the weighting of new area residential and Site residential trips (30% / 70% respectively); and
- The inbound / outbound split is consistent with the adopted office inbound / outbound split. (i.e. 90% / 10% inbound / outbound split during the AM peak, 15% / 85% inbound / outbound split during the PM peak and 50% / 50% inbound / outbound split during the Saturday peak).

The office interaction trips with both area residential and Site residential uses is summarized in **Table 37**.

TABLE 37 OFFICE INTERNAL INTERACTION PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Gross Site Office	*545 (80) [60]*	*65 (505) [65]*	*610 (585) [125]*
With Site Residential	35 (5) [5]	0 (30) [5]	35 (35) [10]
With Area Residential	15 (0) [5]	0 (15) [0]	15 (15) [5]
With Site Retail	5 (5) [0]	5 (5) [0]	10 (10) [0]
Total Internal	**55 (10) [10]**	**5 (50) [5]**	**60 (60) [15]**
Total External	**490 (70) [50]**	**60 (455) [60]**	**550 (525) [110]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The total Site office internal trips are therefore equal to approximately 60 two-way trips during both the weekday morning and afternoon peak hours and 15 two-way trips during the Saturday peak hour. As a result, the total office external trips are 550, 525 and 110 two-way trips during the respective peak hours.

Of the total external office trips, it is projected that in the order of 10% of inbound trips in the AM peak hour, 10% of outbound trips during the PM peak hour and 10% of inbound and outbound trips during the Saturday peak hour are going to link (or pass-through) Site retail, equating to 55 inbound trips during the AM peak hour, 55 outbound trips during the PM peak hour and 5 inbound and outbound trips during the Saturday peak hour. This is further discussed in the retail interaction considerations.

The office interaction trips are illustrated in **Figure 47**.

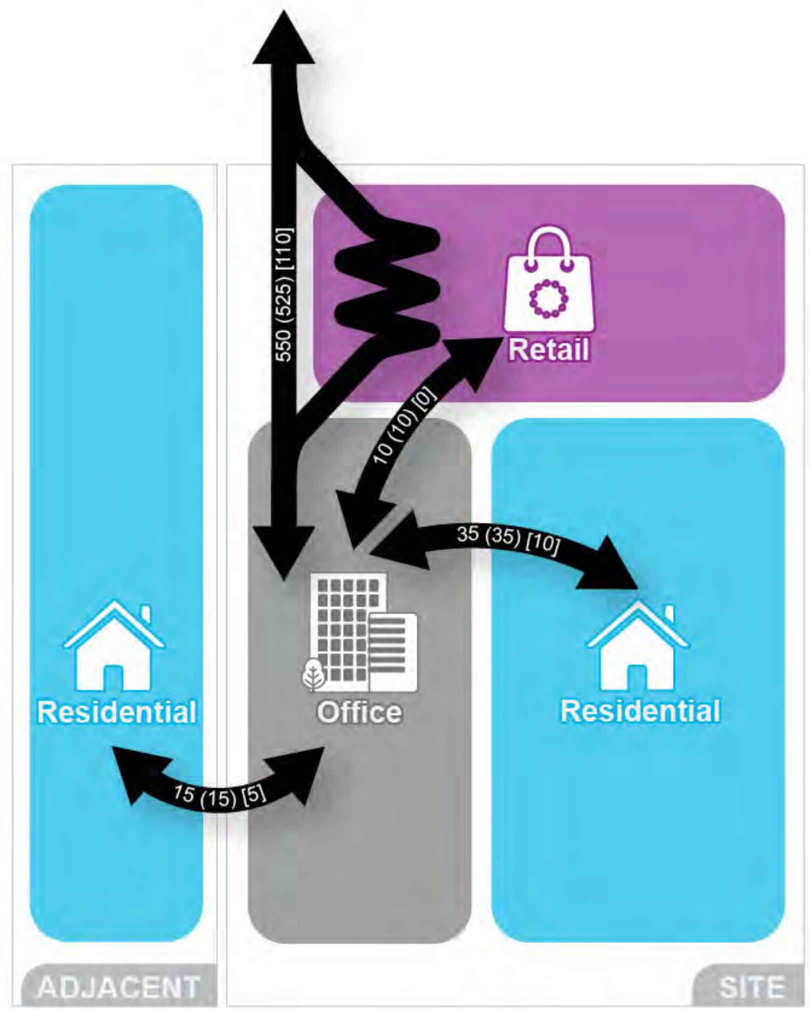


FIGURE 47: OFFICE PERSON TRIPS

Residential Interaction

The Local Area gross residential person trips are re-summarized in **Table 38** for reference. Both the proposed Site residential, existing residential, and future area residential uses are considered.

TABLE 38 GROSS RESIDENTIAL PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Site	740 (2,235) [1,490]	2,980 (1,115) [1,860]	3,720 (3,350) [3,350]
Area New	345 (1,035) [690]	1,380 (520) [865]	1,725 (1,555) [1,555]
Area Existing	690 (2,075) [1,380]	2,765 (1,035) [1,730]	3,455 (3,110) [3,110]
Total	**1,775 (5,345) [3,560]**	**7,125 (2,670) [4,455]**	**8,900 (8,015) [8,015]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

Based on the distribution determined in **Section 5.0**, it is projected that the Local Area will have a local distribution of approximately 10% of residential trips during the AM peak hour and 15% of residential trips during the PM and Saturday peak hours.

For the purposes of this study, it is assumed that:

- All internal interaction with office is as derived above, but reversed.
- The inbound / outbound split for the retail interaction is consistent with the adopted retail inbound/outbound splits, but reversed (i.e. 45% / 55% inbound / outbound split during the AM peak and 50% / 50% inbound / outbound split during the PM and Saturday peaks).

The residential interaction trips with both Site office and Site retail uses is summarized in **Table 39**.

TABLE 39 RESIDENTIAL INTERNAL INTERACTION PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Gross Site Residential	*740 (2,235) [1,490]*	*2,980 (1,115) [1,860]*	*3,720 (3,350) [3,350]*
With Site Office	0 (30) [5]	35 (5) [5]	35 (35) [10]
With Site Retail	150 (235) [245]	185 (235) [250]	335 (470) [495]
Total Site Internal	**150 (265) [250]**	**220 (240) [255]**	**370 (505) [505]**
Total Site External	**590 (1,970) [1,240]**	**2,760 (875) [1,605]**	**3,350 (2,845) [2,845]**
Gross Area Residential	*1,035 (3,110) [2,070]*	*4,145 (1,555) [2,595]*	*5,180 (4,665) [4,665]*
With Site Office	0 (15) [0]	15 (0) [5]	15 (15) [5]
With Site Retail	225 (335) [340]	275 (345) [350]	500 (680) [690]
Total Area Internal	**225 (350) [340]**	**290 (345) [355]**	**515 (695) [695]**
Total Area External	**810 (2,760) [1,730]**	**3,855 (1,210) [2,240]**	**4,665 (3,970) [3,970]**
Total Local Area Gross	**1,775 (5,345) [3,560]**	**7,125 (2,670) [4,455]**	**8,900 (8,015) [8,015]**
Total Local Area Internal	**375 (615) [590]**	**510 (585) [610]**	**885 (1,200) [1,200]**
Total Local Area External	**1,400 (4,730) [2,970]**	**6,615 (2,085) [3,845]**	**8,015 (6,815) [6,815]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

- **Site Residential**

The total internal residential Site trips are therefore equal to approximately 370, 505 and 505 two-way trips during the AM, PM and Saturday peaks respectively. As a result, the total external trips are 3,350, 2,845 and 2,845 two-way trips during the respective peak hours.

Linked retail trips not associated with the Site office or hotel are expected to be associated with the Site and area residential, weighted based on the projected area residential and Site residential trips (60%/40% respectively).

Of the total external Site residential trips, it is projected that in the order of 180 inbound and 200 outbound trips during the AM peak hour, 520 inbound and 500 outbound trips during the PM peak hour and 345 inbound and outbound trips during the Saturday peak hour are going to link (or pass-through) Site retail. This is further discussed in the retail interaction considerations.

- **Area Residential**

The total internal residential area trips are therefore equal to approximately 515, 695 and 695 two-way trips during the AM, PM and Saturday peaks respectively.

As a result, the total external trips are 4,665, 3,970 and 3,970 two-way trips during the respective peak hours.

Of the total external area residential trips, it is projected that in the order of 265 inbound and 300 outbound trips during the AM peak hour, 785 inbound and 750 outbound trips during the PM peak hour and 515 inbound and outbound trips during the Saturday peak hour are going to link (or pass-through) Site retail. This is further discussed in the retail interaction considerations.

The residential interaction trips are illustrated in **Figure 48**.

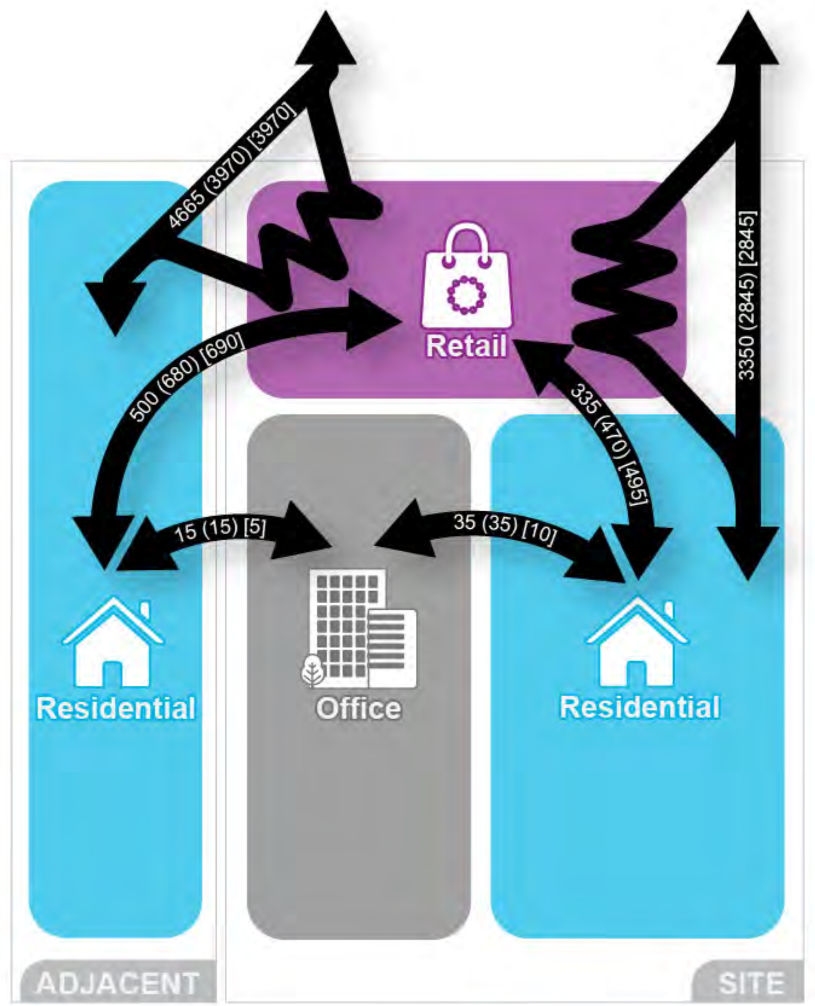


FIGURE 48: RESIDENTIAL PERSON TRIPS

Hotel Interaction

The Local Area gross hotel person trips are re-summarized in **Table 40**.

TABLE 40 GROSS HOTEL PERSON TRIPS

Local Area	Inbound	Outbound	Two-Way
Site	175 (175) [175]	175 (175) [175]	350 (350) [350]
Total	**175 (175) [175]**	**175 (175) [175]**	**350 (350) [350]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The local distribution of hotel trips is assumed to be 10%. For the purposes of this study, it is assumed that all interaction is with Site retail. The hotel interaction trips with Site retail is summarized in **Table 41**.

TABLE 41 HOTEL INTERNAL INTERACTION PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Gross Site Hotel	*175 (175) [175]*	*175 (175) [175]*	*350 (350) [350]*
With Site Retail	20 (20) [20]	15 (15) [15]	35 (35) [35]
Total Internal	**20 (20) [20]**	**15 (15) [15]**	**35 (35) [35]**
Total External	**155 (155) [155]**	**160 (160) [160]**	**315 (315) [315]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The total internal hotel trips are therefore equal to approximately 35 two-way trips during the AM, PM and Saturday peak hours. The total external trips are 315 two-way trips during the respective peak hours.

Of the total external hotel trips, it is projected that in the order of 10% of inbound and outbound trips are going to link (or pass-through) Site retail during all peak periods analyzed, equating to 20 inbound and outbound trips during the AM, PM and Saturday peak hours. This is further discussed in the retail interaction considerations.

The hotel interaction trips are illustrated in **Figure 49.**

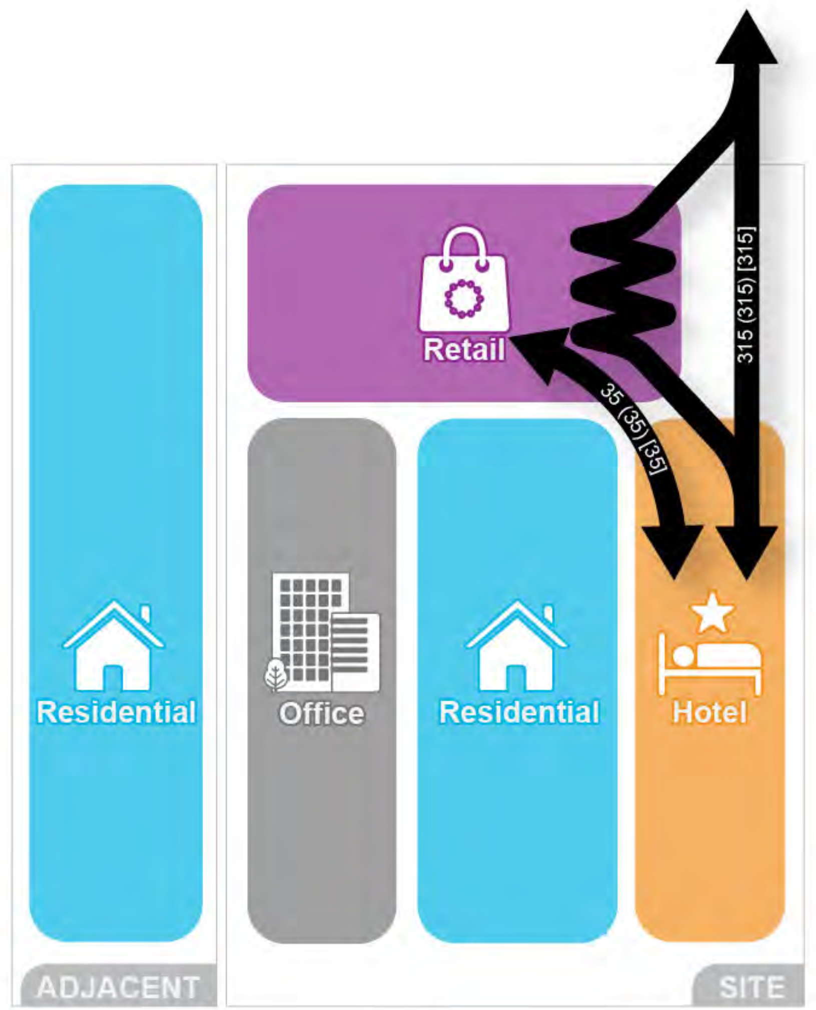


FIGURE 49: HOTEL PERSON TRIPS

Retail Interaction

The Local Area gross retail person trips are re-summarized in **Table 42** for reference.

TABLE 42 GROSS RETAIL PERSON TRIPS

Local Area	Inbound	Outbound	Two-Way
Site	1,175 (2,565) [2,990]	960 (2,560) [2,990]	2,135 (5,125) [5,980]
Total	**1,175 (2,565) [2,990]**	**960 (2,560) [2,990]**	**2,135 (5,125) [5,980]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

As discussed in **Section 5.0**, retail trips are assumed to be largely made to / from the local area given the nature of the retail format considered for the Site and the time travel periods assessed.

It is assumed that 90% of retail trips are made within the local area during the AM peak, 75% of retail trips are made within the local area during the PM peak and 50% of retail trips are made within the local area during the Saturday peak.

It is important to differentiate between the two types of interaction considered for retail trips. As noted within the office, residential, and office interaction consideration sections, a portion of the external trips made by each of the listed land uses will link (or pass through) the Site retail.

Therefore the 90% and 75% local area retail trips are made up of internal interaction (pure internal with Site and adjacent area uses, where both trip ends are within the Local Area boundary) and linked interaction, where either the origin or destination are external to the Site.

For the purposes of this study, it is assumed that:

- Approximately 40% of total interaction trips are considered internal interaction trips made within the Local Area;
- Approximately 60% of total interaction trips are considered linked interaction trips made en route to / from origins or destinations external to the Local Area;

The retail internal interaction trips with Site office, Site residential, and area residential uses are summarized in **Table 43**. As discussed, the internal interaction trips are those made with both the origin and destination within the Local Area.

TABLE 43 RETAIL INTERNAL INTERACTION PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Gross Site Retail	*1,175 (2,565) [2,990]*	*960 (2,560) [2,990]*	*2,135 (5,125) [5,980]*
With Site Office	5 (5) [0]	5 (5) [0]	10 (10) [0]
With Site Residential	185 (235) [250]	150 (235) [245]	335 (470) [495]
With Area Residential	275 (345) [350]	225 (335) [340]	500 (680) [690]
With Site Hotel	15 (15) [15]	20 (20) [20]	35 (35) [35]
Total Internal Interaction	**480 (600) [615]**	**400 (595) [605]**	**880 (1,195) [1,220]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The total internal interaction retail trips are therefore equal to approximately 880, 1,195 and 1,220 two-way trips during the AM, PM and Saturday peak hours respectively.

The retail linked interaction trips with Site office, Site residential, and area residential uses are summarized in **Table 44**. As discussed, the linked interaction trips are those made with either the origin or destination external to the Local Area (external office, residential, or hotel trips).

Table 44 summarizes the total interaction trips of the Local Area, inclusive of internal and linked interaction trips.

TABLE 44 RETAIL LINKED INTERACTION PERSON TRIPS

Land Use	Inbound	Outbound	Two-Way
Gross Site Retail	*1,175 (2,565) [2,990]*	*960 (2,560) [2,990]*	*2,135 (5,125) [5,980]*
Total Internal Interaction	480 (600) [615]	400 (595) [605]	880 (1,195) [1,220]
Total Linked Interaction	520 (1,325) [885]	520 (1,325) [885]	1,040 (2,650) [1,770]
Total Interaction	**1,000 (1,925) [1,500]**	**920 (1,920) [1,490]**	**1,920 (3,845) [2,990]**
Total External	**175 (640) [1,490]**	**40 (640) [1,500]**	**215 (1,280) [2,990]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The total linked interaction Site retail trips are therefore equal to approximately 1,040, 2,650 and 1,770 two-way trips during the AM, PM and Saturday peak hours respectively.

The total interaction trips (including both internal and linked trips) with primary Site uses are 1,920, 3,845 and 2,990 two-way trips during the respective peaks. The resultant projected external retail trips is therefore 215, 1,280 and 2,990 during the respective peaks.

The retail interaction trips are illustrated in **Figure 50.**

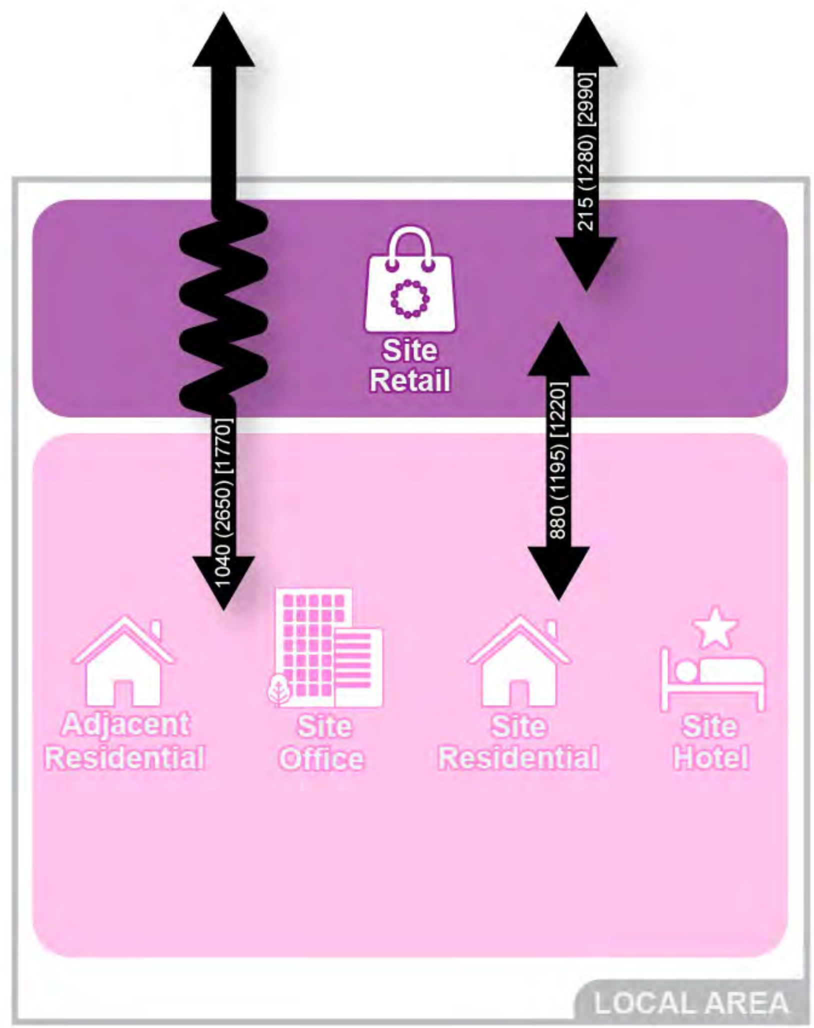


FIGURE 50: RETAIL PERSON TRIPS

Summary of Interaction

The total interaction person trips generated by the Local Area are summarized by pure internal and linked interaction trips in the following.

- **Internal Interaction Trips**

The local area is projected to generate in the order of **930**, **1,245**, and **1,235** two-way internal interaction person trips during the AM, PM and Saturday peak hours, respectively, as summarized in **Table 45** and illustrated in **Figure 51.**

TABLE 45 SUMMARY OF INTERNAL INTERACTION PERSON TRIPS

Land Use	Two-Way
Site	
Office-Residential	35 (35) [10]
Retail-Residential	335 (470) [495]
Retail-Office	10 (10) [0]
Retail-Hotel	35 (35) [35]
Total Site	**415 (550) [540]**
Adjacent Area	
Office-Residential	15 (15) [5]
Retail-Residential	500 (680) [690]
Total Area	**515 (695) [695]**
Total Local Area	**930 (1,245) [1,235]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

- **Linked Interaction Trips**

The local area is projected to generate approximately **1,040**, **2,650** and **1,770** linked interaction person trips during the AM, PM and Saturday peak hours respectively, as summarized in **Table 46** and illustrated **Figure 52**.

TABLE 46 SUMMARY OF LINKED INTERACTION PERSON TRIPS (RETAIL)

Land Use	Two-Way
Site	
With Site Office[2]	55 (55) [10]
With Site Residential[3]	380 (1,020) [690]
With Site Hotel[4]	40 (40) [40]
Total Site	**475 (1,115) [740]**
Adjacent Area	
With Area Residential[5]	565 (1,535) [1,030]
Total Local Area	**1,040 (2,650) [1,770}**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

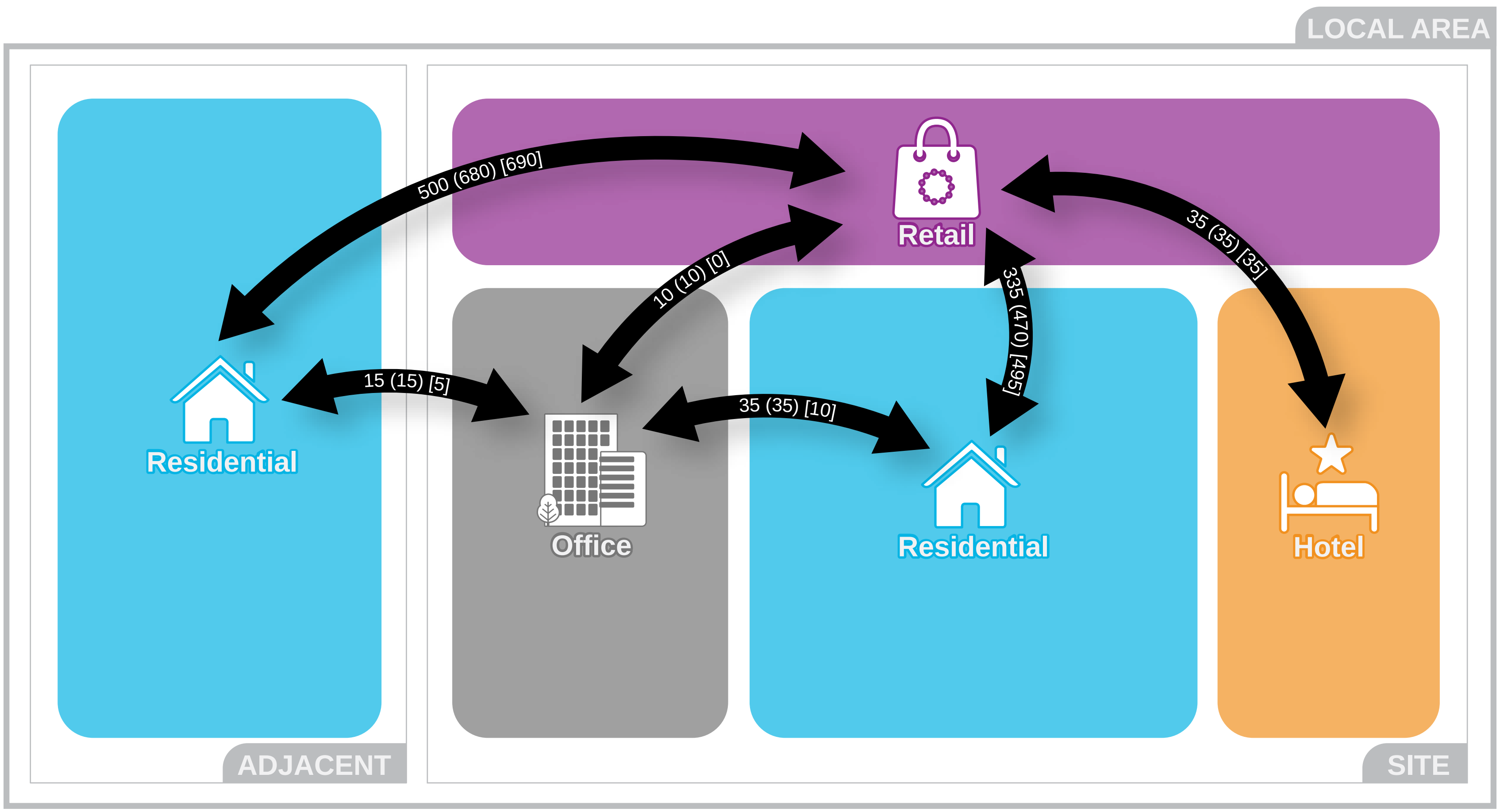


FIGURE 51 INTERNAL INTERACTION PERSON TRIPS

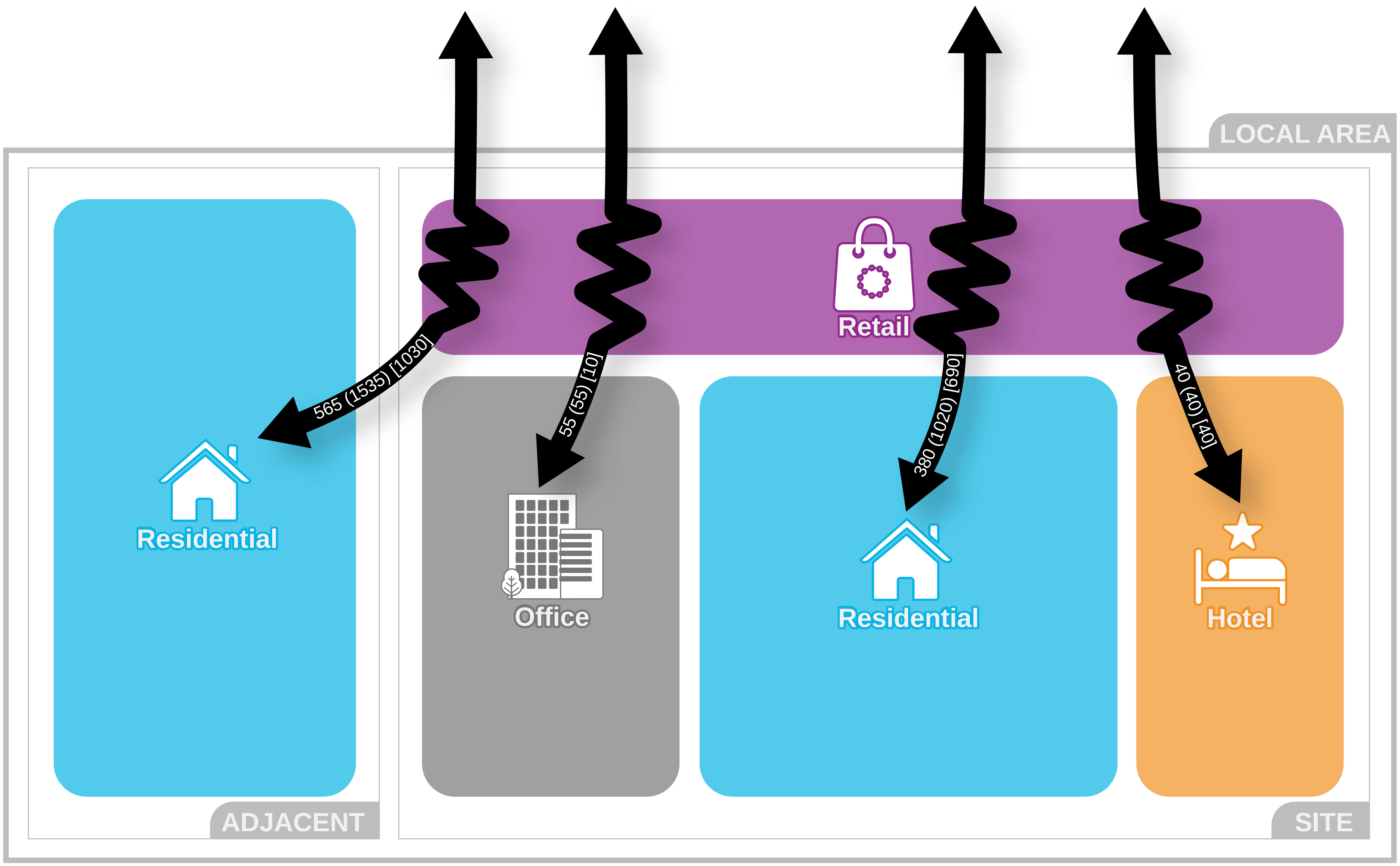


FIGURE 52 LINKED INTERACTION PERSON TRIPS

6.2.4 Summary of Person Trips

A summary of the Local Area person trips by Site and area is provided in the following and illustrated in **Figure 53**.

- **Site Person Trips**

The Site is projected to generate in the order of **4,430**, **4,965**, and **6,260** two-way external person trips during the weekday morning, afternoon and Saturday peak hour, respectively, as summarized in **Table 48**.

- **Adjacent Area Person Trips**

The adjacent area comprising existing and new residential uses in the Humber Bay Shores and Park Lawn neighbourhoods are projected to generate approximately **4,665, 3,970** and **3,970** two-way external person trips during the weekday morning, afternoon and Saturday peak hour, respectively, as summarized in **Table 47**.

TABLE 47 ADJACENT AREA PERSON TRIPS SUMMARY

Land Use	Inbound	Outbound	Two-Way
Gross	*1,035 (3,110) [2,070]*	*4,145 (1,555) [2,595]*	*5,180 (4,665) [4,665]*
Internal	225 (350) [340]	290 (345) [355]	515 (695) [695]
External	810 (2,760) [1,730]	3,855 (1,210) [2,240]	4,665 (3,970) [3,970]

Notes:
1. XX (XX) [XX] = AM (PM) [SAT]

TABLE 48 SITE PERSON TRIPS SUMMARY

Land Use	Inbound	Outbound	Two-Way
Residential			
Gross	740 (2,235) [1,490]	2,980 (1,115) [1,860]	3,720 (3,350) [3,350]
Internal	150 (265) [250]	220 (240) [255]	370 (505) [505]
External	590 (1,970) [1,240]	2,760 (875) [1,605]	3,350 (2,845) [2,845]
Office			
Gross	545 (80) [60]	65 (505) [65]	610 (585) [125]
Internal	55 (10) [10]	5 (50) [5]	60 (60) [15]
External	490 (70) [50]	60 (455) [60]	550 (525) [110]
Hotel			
Gross	175 (175) [175]	175 (175) [175]	350 (350) [350]
Internal	20 (20) [20]	15 (15) [15]	35 (35) [35]
External	155 (155) [155]	160 (160) [160]	315 (315) [315]
Retail			
Gross	1,175 (2,565) [2,990]	960 (2,560) [2,990]	2,135 (5,125) [5,980]
Internal	480 (600) [615]	400 (595) [605]	880 (1,195) [1,220]
Linked (Site)	255 (540) [370]	220 (575) [370]	475 (1,115) [740]
Linked (Area)	*265 (785) [515]*	*300 (750) [515]*	*565 (1,535) [1,030]*
External	175 (640) [1,490]	40 (640) [1,500]	215 (1,280) [2,990]
Total Gross	**2,635 (5,055) [4,715]**	**4,180 (4,355) [5,090]**	**6,815 (9,410) [9,805]**
Total Internal	**705 (895) [895]**	**640 (900) [880]**	**1,345 (1,795) [1,775]**
Total Linked	**520 (1,325) [885]**	**520 (1,325) [885]**	**1,040 (2,650) [1,770]**
Total External	**1,410 (2,835) [2,935]**	**3,020 (2,130) [3,325]**	**4,430 (4,965) [6,260]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

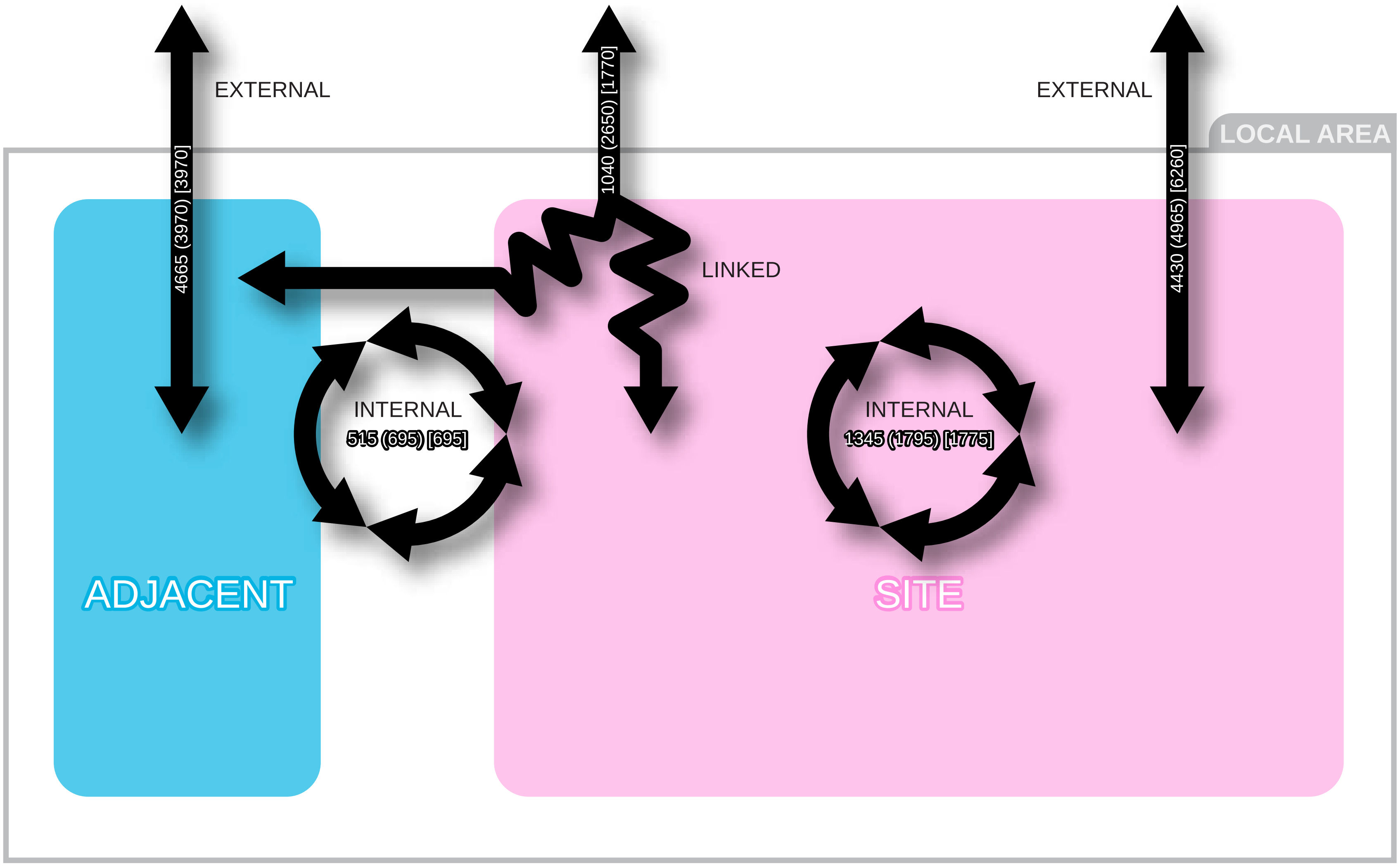


FIGURE 53 PERSON TRIPS SUMMARY

6.2.5 Local Area Travel Demand by Mode

6.2.5.1 Office Demand

The adopted person trip distributions and associated mode splits for employment based trips as outlined in **Section 5.3** of this report were applied to the proposed office use.

The resultant office trips by mode are summarized in **Table 49**, whilst a graphical summary of the office trips distribution by mode is provided in **Figure 55**.

The overall mode split associated with employment based trips is illustrated in **Figure 54**.

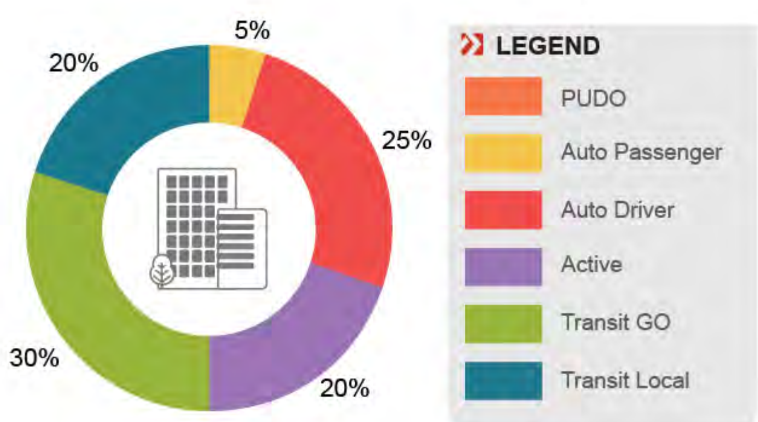


FIGURE 54: RESULTANT SITE OFFICE MODE SHARE

TABLE 49 SITE OFFICE TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Office External Trips			
Auto Driver	135 (30) [20]	20 (120) [20]	155 (150) [40]
Auto Passenger	20 (0) [0]	0 (20) [0]	20 (20) [0]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	165 (15) [5]	10 (160) [10]	175 (175) [15]
Transit Local	115 (25) [25]	30 (100) [30]	145 (125) [55]
Walk	20 (0) [0]	0 (20) [0]	20 (20) [0]
Cycle	35 (0) [0]	0 (35) [0]	35 (35) [0]
Total	490 (70) [50]	60 (455) [60]	550 (525) [110]
Office Internal Trips			
Walk	55 (10) [10]	5 (50) [5]	60 (60) [15]
Office Total Trips			
Auto Driver	135 (30) [20]	20 (120) [20]	155 (150) [40]
Auto Passenger	20 (0) [0]	0 (20) [0]	20 (20) [0]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	165 (15) [5]	10 (160) [10]	175 (175) [15]
Transit Local	115 (25) [25]	30 (100) [30]	145 (125) [55]
Walk	75 (10) [10]	5 (70) [5]	80 (80) [15]
Cycle	35 (0) [0]	0 (35) [0]	35 (35) [0]
Total	545 (80) [60]	65 (505) [65]	610 (585) [125]

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

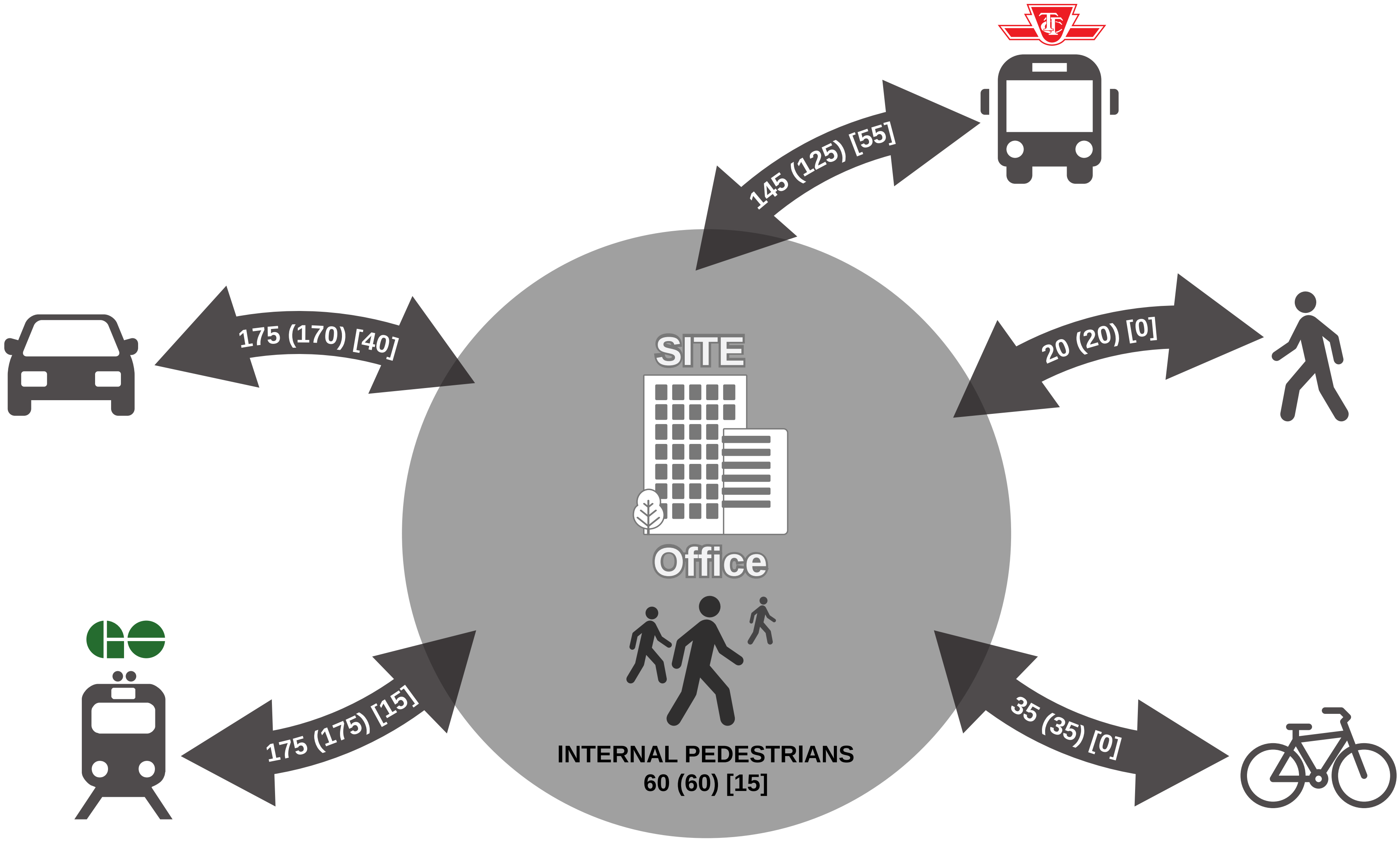


FIGURE 55 TOTAL SITE OFFICE TRIPS BY MODE

6.2.5.2 Residential Demand

The adopted person trip distributions and associated mode splits for residential based trips as outlined in **Section 5.3** of this report were applied to the proposed Site residential use as well as area residential.

The resultant residential trips by mode are summarized in **Table 50** and **Table 51** for Site and area residential trips respectively, whilst a graphical summary of the residential trips distribution by mode is provided in **Figure 57** and **Figure 58** for Site and area residential trips respectively.

The overall mode split associated with residential based trips is illustrated in **Figure 56**.

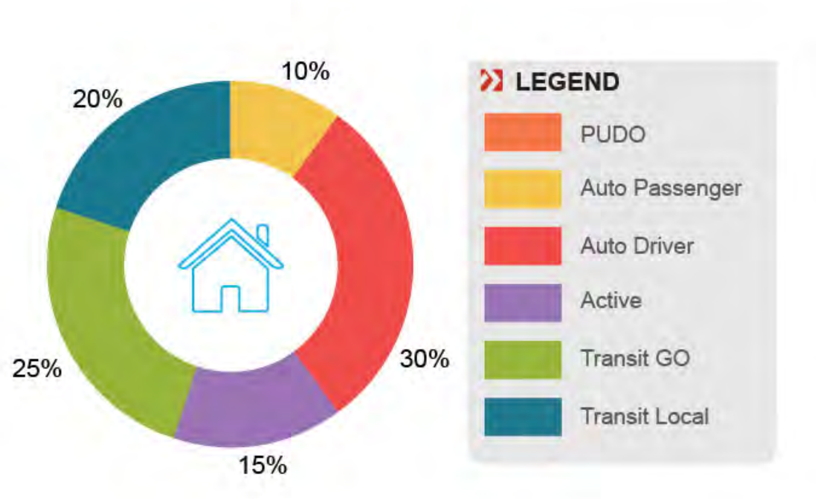


FIGURE 56: RESULTANT SITE RESIDENTIAL MODE SHARE

TABLE 50 SITE RESIDENTIAL TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Residential External Trips			
Auto Driver	170 (575) [360]	810 (255) [470]	980 (830) [830]
Auto Passenger	50 (170) [100]	235 (70) [140]	285 (240) [240]
Auto PuDo	5 (10) [5]	15 (5) [10]	20 (15) [15]
Transit GO	175 (590) [370]	820 (260) [480]	995 (850) [850]
Transit Local	155 (505) [325]	710 (230) [405]	865 (735) [730]
Walk	5 (10) [5]	15 (5) [10]	20 (15) [15]
Cycle	30 (110) [75]	155 (50) [90]	185 (160) [165]
Total	590 (1,970) [1,240]	2,760 (875) [1,605]	3,350 (2,845) [2,845]
Residential Internal Trips			
Walk	150 (265) [250]	220 (240) [255]	370 (505) [505]
Residential Total Trips			
Auto Driver	170 (575) [360]	810 (255) [470]	980 (830) [830]
Auto Passenger	50 (170) [100]	235 (70) [140]	285 (240) [240]
Auto PuDo	5 (10) [5]	15 (5) [10]	20 (15) [15]
Transit GO	175 (590) [370]	820 (260) [480]	995 (850) [850]
Transit Local	155 (505) [325]	710 (230) [405]	865 (735) [730]
Walk	155 (275) [255]	235 (245) [265]	390 (520) [520]
Cycle	30 (110) [75]	155 (50) [90]	185 (160) [165]
Total	*740 (2,235) [1,490]*	*2,980 (1,115) [1,860]*	*3,720 (3,350) [3,350]*

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

Table 51 Area Residential Trips by Mode

Land Use	Inbound	Outbound	Two-Way
Residential External Trips			
Auto Driver	240 (795) [495]	1,115 (350) [660]	1,355 (1,145) [1,155]
Auto Passenger	65 (220) [145]	325 (100) [195]	390 (320) [340]
Auto PuDo	5 (15) [10]	20 (5) [15]	25 (20) [25]
Transit GO	230 (820) [505]	1,140 (375) [650]	1,370 (1,195) [1,155]
Transit Local	225 (740) [475]	1,020 (305) [580]	1,245 (1,045) [1,055]
Walk	5 (15) [10]	20 (5) [15]	25 (20) [25]
Cycle	40 (155) [90]	215 (70) [125]	255 (225) [215]
Total	810 (2,760) [1,730]	3,855 (1,210) [2,240]	4,665 (3,970) [3,970]
Residential Internal Trips			
Walk	225 (350) [340]	290 (345) [355]	515 (695) [695]
Residential Total Trips			
Auto Driver	240 (795) [495]	1,115 (350) [660]	1,355 (1,145) [1,155]
Auto Passenger	65 (220) [145]	325 (100) [195]	390 (320) [340]
Auto PuDo	5 (15) [10]	20 (5) [15]	25 (20) [25]
Transit GO	230 (820) [505]	1,140 (375) [650]	1,370 (1,195) [1,155]
Transit Local	225 (740) [475]	1,020 (305) [580]	1,245 (1,045) [1,055]
Walk	230 (365) [350]	310 (350) [370]	540 (715) [720]
Cycle	40 (155) [90]	215 (70) [125]	255 (225) [215]
Total	1,035 (3,110) [2,070]	4,145 (1,555) [2,595]	5,180 (4,665) [4,665]

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

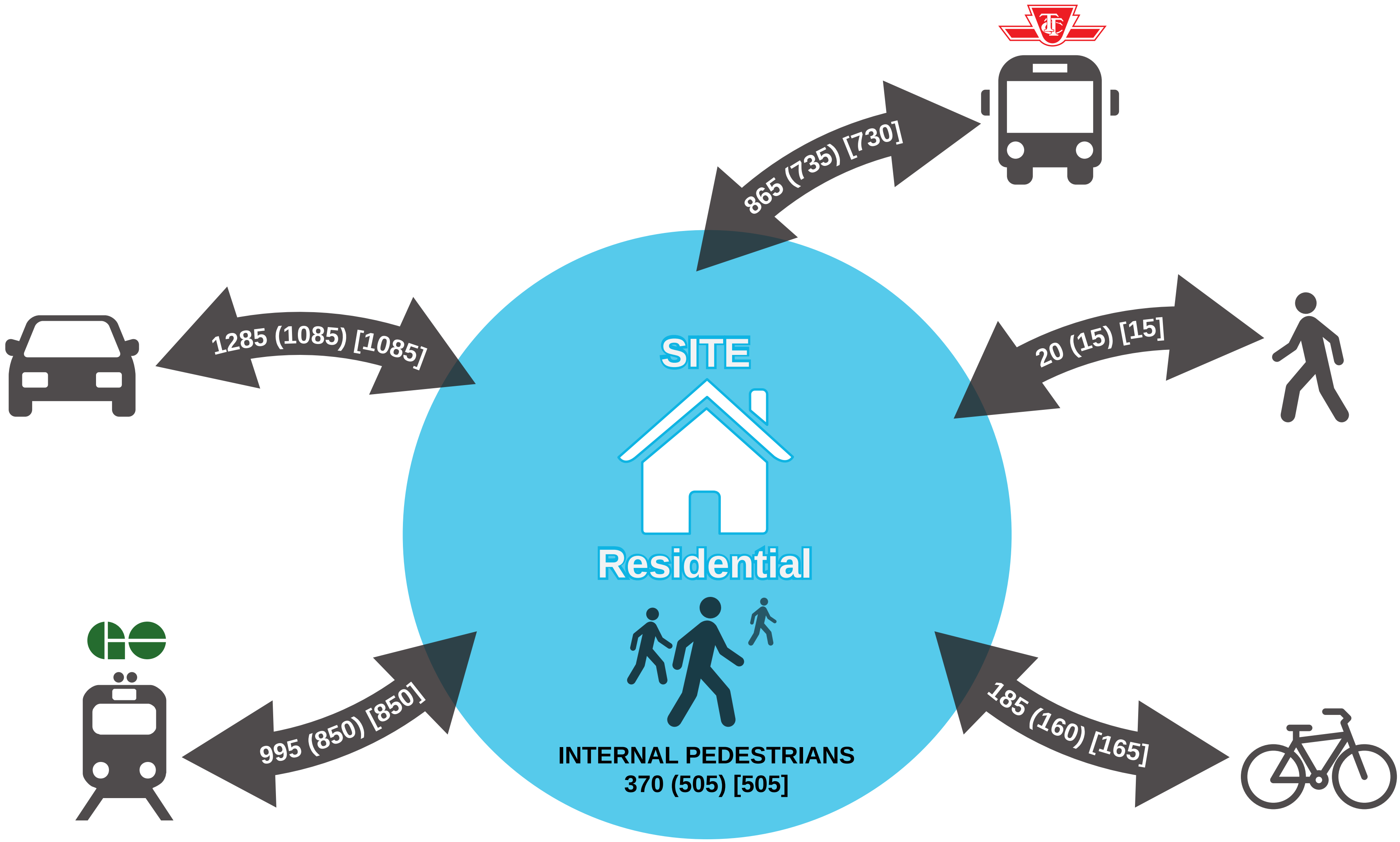


FIGURE 57 TOTAL SITE RESIDENTIAL TRIPS BY MODE

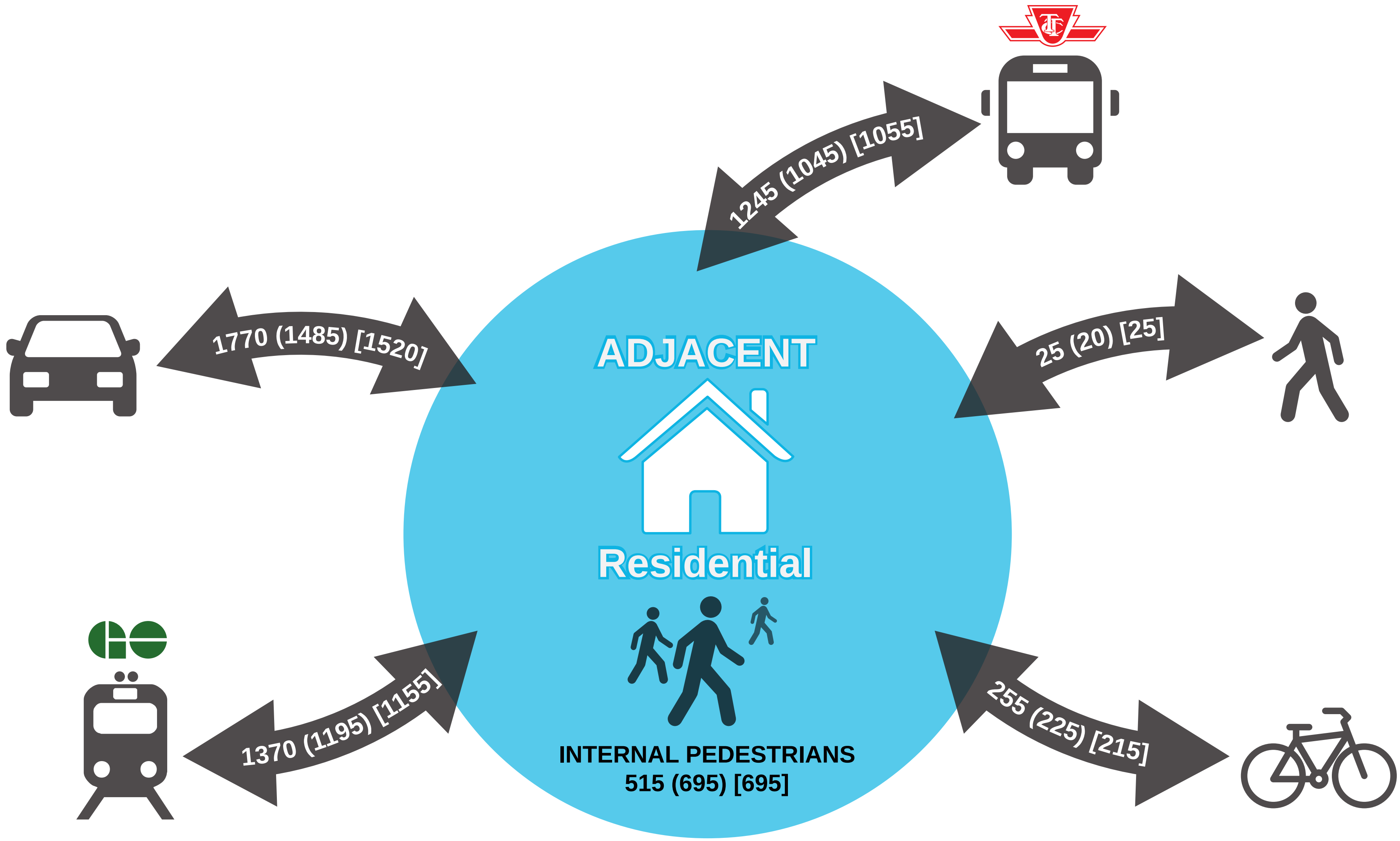


FIGURE 58 TOTAL ADJACENT RESIDENTIAL TRIPS BY MODE

6.2.5.3 Retail Demand

In addition to the calculation of the gross retail trips and the interaction with the Site and area uses, pass-by considerations are also applied to the proposed retail land use. The adopted pass-by rate is based upon formulations provided within the ITE Trip Generation Manual.

A pass-by rate of 0%, 34% and 26% was adopted for the AM, PM and Saturday peak hours respectively and was applied to the total external trips after the internal interaction calculations.

A summary of the forecast retail trips is provided in **Table 52**.

TABLE 52 SUMMARY OF RETAIL TRIPS

Land Use	Inbound	Outbound	Two-Way
Gross Site Retail	1,175 (2,565) [2,990]	960 (2,560) [2,990]	2,135 (5,125) [5,980]
Total Interaction	1,000 (1,925) [1,500]	920 (1,920) [1,490]	1,920 (3,845) [2,990]
Total External	175 (640) [1,490]	40 (640) [1,500]	215 (1,280) [2,990]
Pass-by[2]	0 (220) [390]	0 (220) [390]	0 (440) [780]
Total Primary	**175 (420) [1,100]**	**40 (420) [1,110]**	**215 (840) [2,210]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]
2. Assumes a pass-by percentage of total external of 0% during the AM peak, 34% during the PM peak and 26% during the Saturday peak.

Subsequently, the adopted person trip distributions and associated mode splits for retail based trips as outlined in **Section 5.3** of this report were applied to the proposed retail use.

The resultant retail trips by mode are summarized in **Table 53**, whilst a graphical summary of the retail trips distribution by mode is provided in **Figure 61**.

The overall mode split associated with retail based trips is illustrated in **Figure 59** and **Figure 60**.

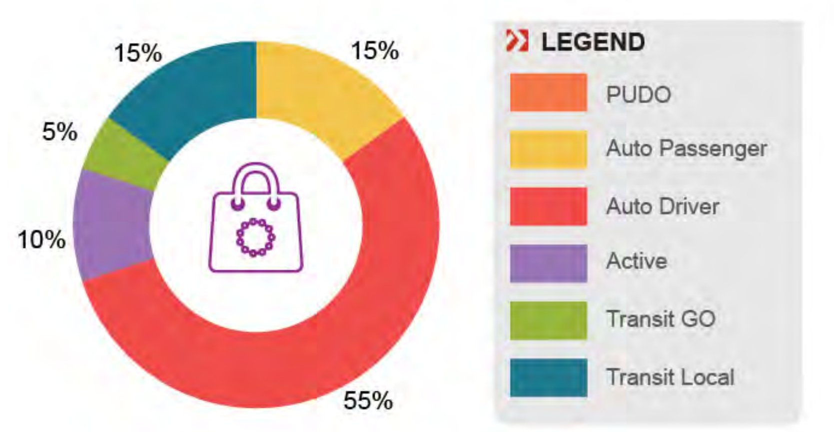


FIGURE 59: RESULTANT RETAIL MODE SHARE (EXTERNAL)

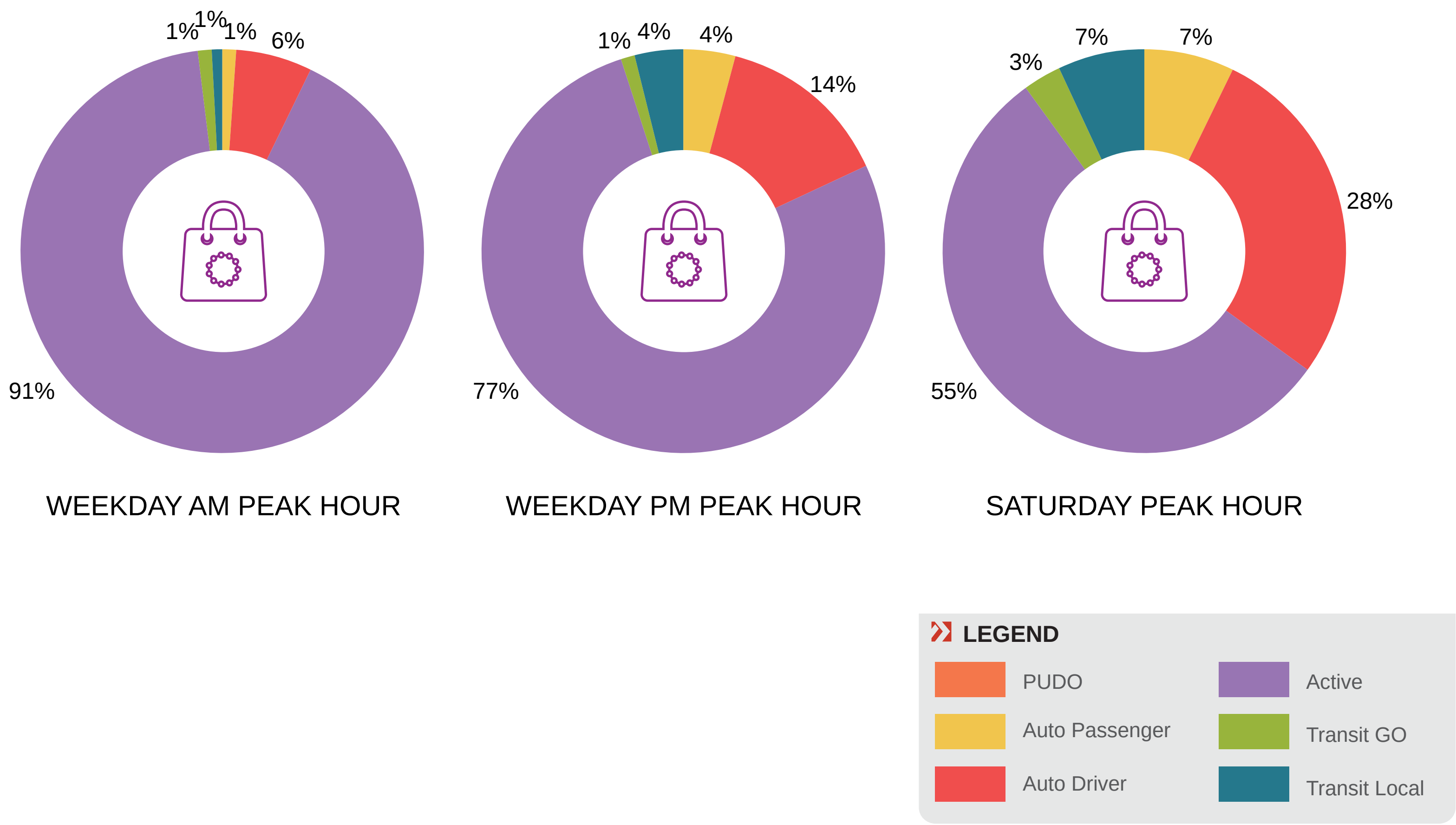


FIGURE 60 RESULTANT RETAIL MODE SHARE (OVERALL)

TABLE 53 SITE RETAIL TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Retail Primary Trips			
Auto Driver	95 (230) [605]	20 (230) [610]	115 (460) [1,215]
Auto Passenger	25 (65) [165]	5 (65) [165]	30 (130) [330]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	10 (20) [55]	0 (20) [55]	10 (40) [110]
Transit Local	25 (65) [165]	15 (65) [170]	40 (130) [335]
Walk	10 (20) [55]	0 (20) [55]	10 (40) [110]
Cycle	10 (20) [55]	0 (20) [55]	10 (40) [110]
Total	175 (420) [1,100]	40 (420) [1,110]	215 (840) [2,210]
Retail Internal Trips			
Walk	480 (600) [615]	400 (595) [605]	880 (1,195) [1,220]
Retail Linked Trips			
Walk	520 (1,325) [885]	520 (1,325) [885]	1,040 (2,650) [1,770]
Retail Pass-By Trips			
Auto Driver	0 (120) [215]	0 (120) [215]	0 (240) [430]
Auto Passenger	0 (35) [60]	0 (35) [60]	0 (70) [120]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	0 (10) [20]	0 (10) [20]	0 (20) [40]
Transit Local	0 (35) [55]	0 (35) [55]	0 (70) [110]
Walk	0 (10) [20]	0 (10) [20]	0 (20) [40]
Cycle	0 (10) [20]	0 (10) [20]	0 (20) [40]
Total	0 (220) [390]	0 (220) [390]	0 (440) [780]

Land Use	Inbound	Outbound	Two-Way
Retail Total Trips			
Auto Driver	95 (350) [820]	20 (350) [825]	115 (700) [1,645]
Auto Passenger	25 (100) [225]	5 (100) [225]	30 (200) [450]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	10 (30) [75]	0 (30) [75]	10 (60) [150]
Transit Local	25 (100) [220]	15 (100) [225]	40 (200) [445]
Walk	1,010 (1,955) [1,575]	920 (1,950) [1,565]	1,930 (3,905) [3,140]
Cycle	10 (30) [75]	0 (30) [75]	10 (60) [150]
Total	1,175 (2,565) [2,990]	960 (2,560) [2,990]	2,135 (5,125) [5,980]

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

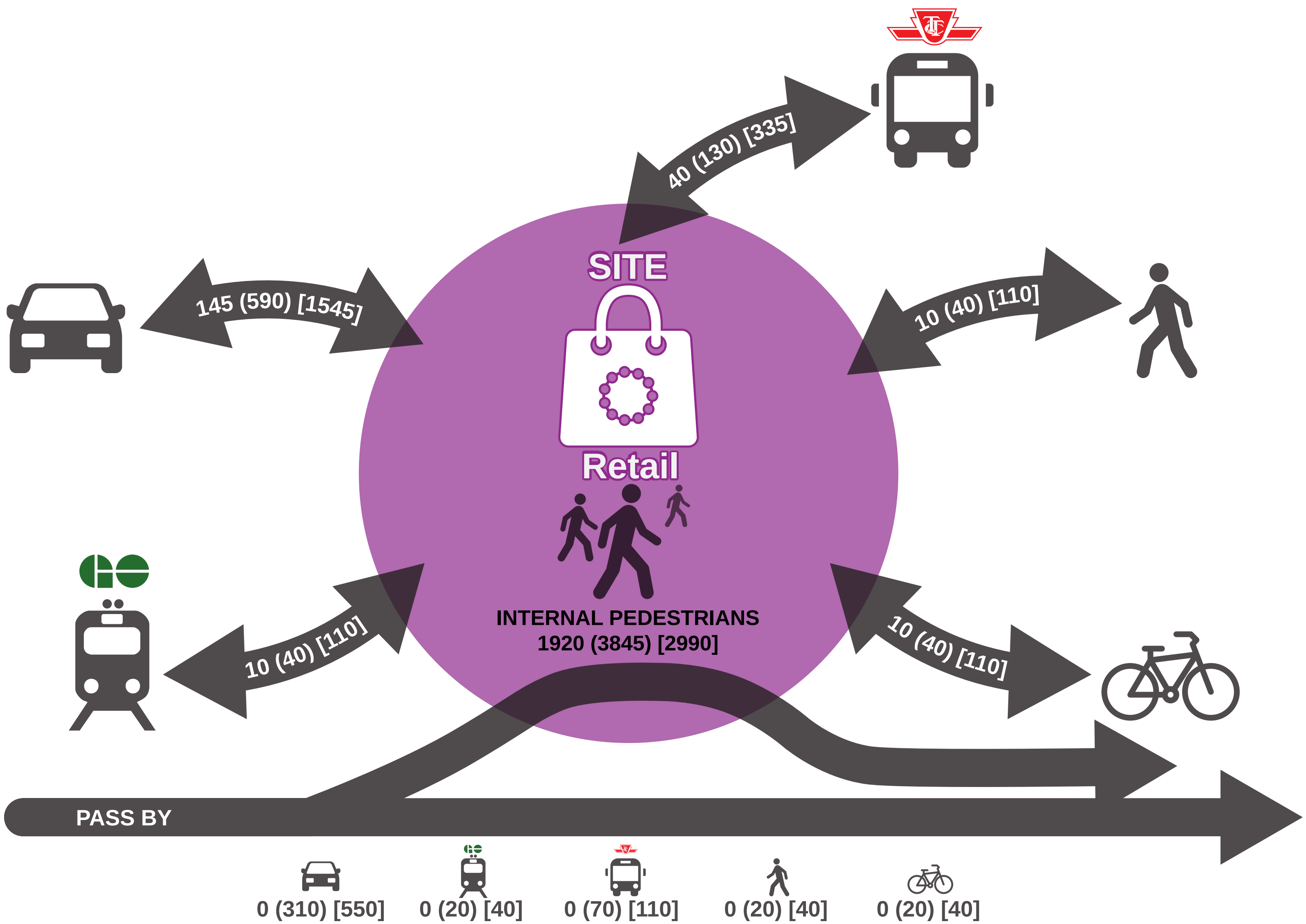


FIGURE 61 TOTAL SITE RETAIL TRIPS BY MODE

6.2.5.4 Hotel Demand

The adopted person trip distributions and associated mode splits for residential based trips were applied to the proposed hotel use.

The resultant hotel trips by mode are summarized in **Table 54**.

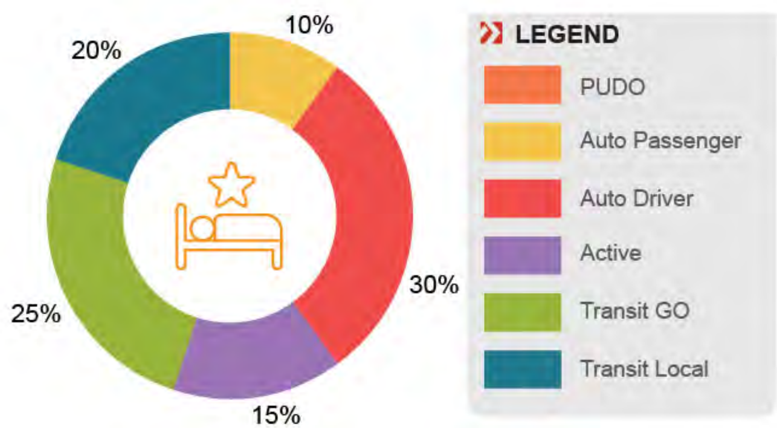


FIGURE 62: RESULTANT HOTEL MODE SHARE

TABLE 54 SITE HOTEL TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Hotel External Trips			
Auto Driver	50 (50) [50]	50 (50) [50]	100 (100) [100]
Auto Passenger	10 (10) [10]	10 (10) [10]	20 (20) [20]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	45 (45) [45]	45 (45) [45]	90 (90) [90]
Transit Local	40 (40) [40]	50 (50) [50]	90 (90) [90]
Walk	0 (0) [0]	0 (0) [0]	0 (0) [0]
Cycle	10 (10) [10]	5 (5) [5]	15 (15) [15]
Total	155 (155) [155]	160 (160) [160]	315 (315) [315]
Hotel Internal Trips			
Walk	20 (20) [20]	15 (15) [15]	35 (35) [35]
Hotel Total Trips			
Auto Driver	50 (50) [50]	50 (50) [50]	100 (100) [100]
Auto Passenger	10 (10) [10]	10 (10) [10]	20 (20) [20]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	45 (45) [45]	45 (45) [45]	90 (90) [90]
Transit Local	40 (40) [40]	50 (50) [50]	90 (90) [90]
Walk	20 (20) [20]	15 (15) [15]	35 (35) [35]
Cycle	10 (10) [10]	5 (5) [5]	15 (15) [15]
Total	175 (175) [175]	175 (175) [175]	350 (350) [350]

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

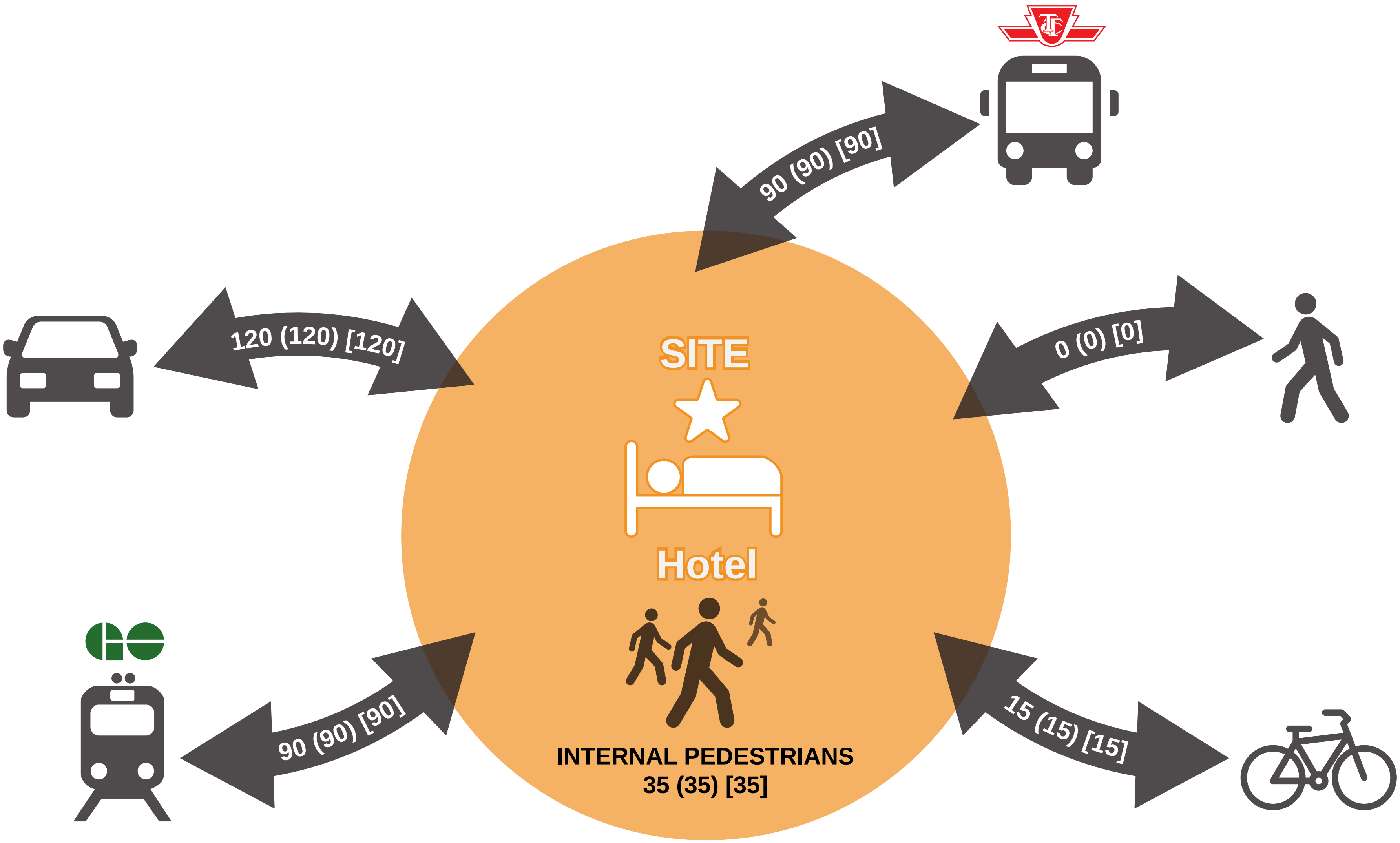


FIGURE 63 TOTAL SITE HOTEL TRIPS BY MODE

6.2.6 Summary of Local Area Multi-Modal Travel Demands

A summary of the Local Area person trips by Site and area is provided in the following.

- **Site Person Trips**

The Site is projected to generate in the order of **4,430**, **4,525**, and **5,480** two-way external person trips (not including pass-by trips) during the weekday morning, afternoon and Saturday peak hour respectively.

The Site trips are summarized in **Table 55** and **Table 56** and illustrated in **Figure 64**.

TABLE 55 SITE TOTAL TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Primary Trips			
Auto Driver	450 (885) [1,035]	900 (655) [1,150]	1,350 (1,540) [2,185]
Auto Passenger	105 (245) [275]	250 (165) [315]	355 (410) [590]
Auto PuDo	5 (10) [5]	15 (5) [10]	20 (15) [15]
Transit GO	395 (670) [475]	875 (485) [590]	1,270 (1,155) [1,065]
Transit Local	335 (635) [555]	805 (445) [655]	1,140 (1,080) [1,210]
Walk	35 (30) [60]	15 (45) [65]	50 (75) [125]
Cycle	85 (140) [140]	160 (110) [150]	245 (250) [290]
Total	1,410 (2,615) [2,545]	3,020 (1,910) [2,935]	4,430 (4,525) [5,480]

TABLE 56 SITE TOTAL TRIPS BY MODE (CONT'D)

Land Use	Inbound	Outbound	Two-Way
Site Internal Trips			
Walk	705 (895) [895]	640 (900) [880]	1,345 (1,795) [1,775]
Site (Retail) Linked Trips			
Walk	520 (1,325) [885]	520 (1,325) [885]	1,040 (2,650) [1,770]
Site (Retail) Pass-By Trips			
Auto Driver	0 (120) [215]	0 (120) [215]	0 (240) [430]
Auto Passenger	0 (35) [60]	0 (35) [60]	0 (70) [120]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	0 (10) [20]	0 (10) [20]	0 (20) [40]
Transit Local	0 (35) [55]	0 (35) [55]	0 (70) [110]
Walk	0 (10) [20]	0 (10) [20]	0 (20) [40]
Cycle	0 (10) [20]	0 (10) [20]	0 (20) [40]
Total	0 (220) [390]	0 (220) [390]	0 (440) [780]
Site Total Trips			
Auto Driver	450 (1,005) [1,250]	900 (775) [1,365]	1,350 (1,780) [2,615]
Auto Passenger	105 (280) [335]	250 (200) [375]	355 (480) [710]
Auto PuDo	5 (10) [5]	15 (5) [10]	20 (15) [15]
Transit GO	395 (680) [495]	875 (495) [610]	1,270 (1,175) [1,105]
Transit Local	335 (670) [610]	805 (480) [710]	1,140 (1,150) [1,320]
Walk	1,260 (2,260) [1,860]	1,175 (2,280) [1,850]	2,435 (4,540) [3,710]
Cycle	85 (150) [160]	160 (120) [170]	245 (270) [330]
Total	2,635 (5,055) [4,715]	4,180 (4,355) [5,090]	6,815 (9,410) [9,805]

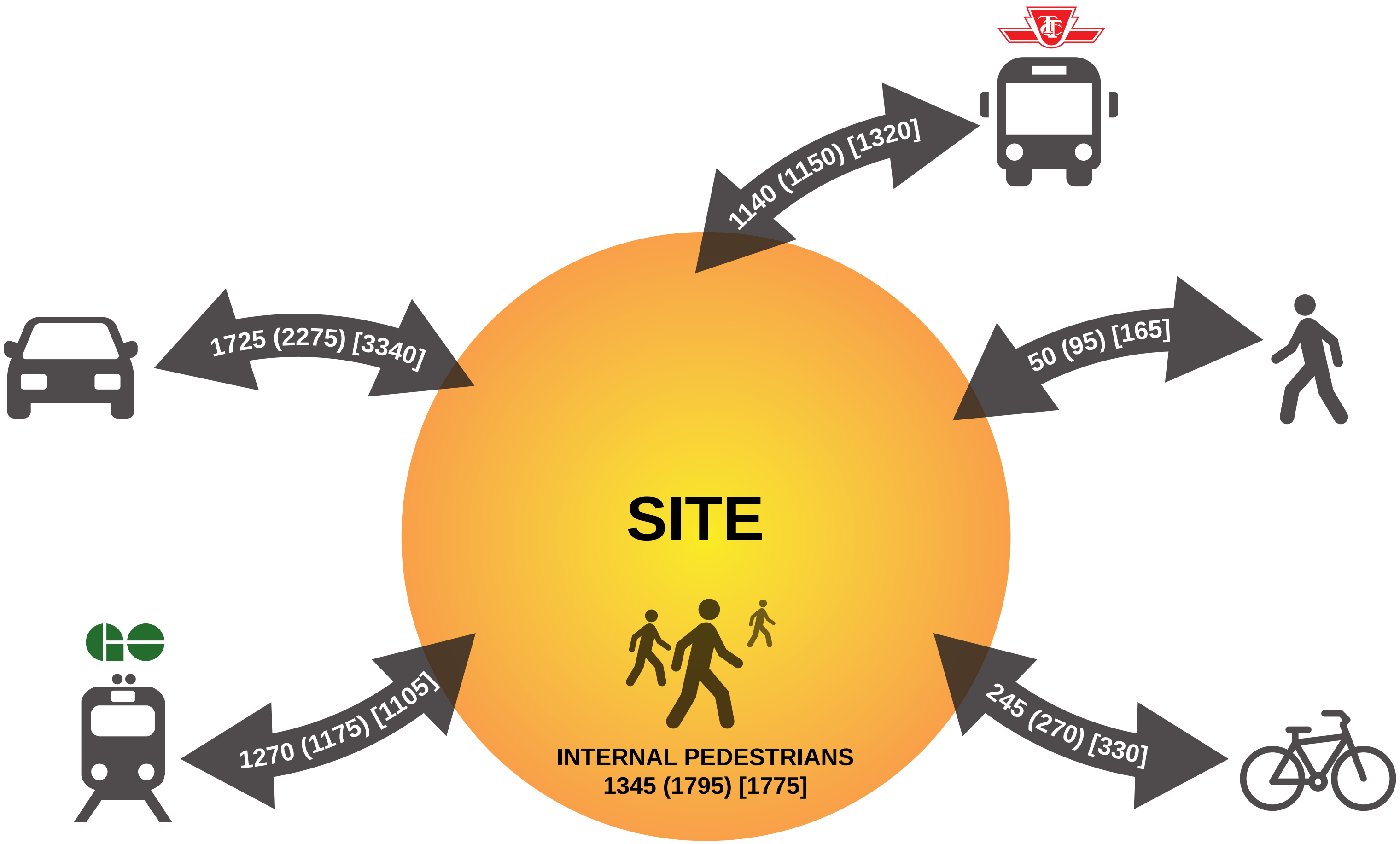


FIGURE 64 TOTAL SITE TRIPS BY MODE

- **Adjacent Area Person Trips**

The adjacent area comprising existing and new residential uses in the Humber Bay Shores and Park Lawn neighbourhoods are projected to generate approximately **4,665, 3,970** and **3,970** two-way external person trips during the weekday morning, afternoon and Saturday peak hour respectively. The adjacent area trips are summarized in **Table 58** and illustrated in **Figure 65**.

The resulting change in trips by mode for the existing development in the area has also been reviewed and is outlined in **Table 57**. The resultant overall change in vehicle trips is in the order of -1,100 (55% reduction), whilst the increase to GO trips is in the order of +800 and the increase to walking trips is in the order of +400.

TABLE 57 LOCAL AREA EXISTING DEVELOPMENT TOTAL TRIPS BY MODE

Land Use	Existing Two-Way	Future Two-Way	Difference Two-Way
Auto Driver	2,030 (1,825) [1,845]	905 (770) [770]	-1,125 (-1,055) [-1,075]
Auto Passenger	245 (215) [225]	260 (220) [235]	+15 (+5) [+10]
Auto PuDo	45 (45) [40]	20 (15) [15]	-25 (-30) [-25]
Transit GO	35 (35) [30]	915 (785) [790]	+880 (+750) [+760]
Transit Local	1,045 (940) [920]	815 (690) [670]	-230 (-250) [-250]
Walk	0 (0) [0]	365 (480) [480]	+365 (+480) [+480]
Cycle	55 (50) [50]	175 (150) [150]	+120 (+100) [+100]
Total	3,455 (3,110) [3,110]	3,455 (3,110) [3,110]	

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

TABLE 58 ADJACENT AREA TOTAL TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Residential External Trips			
Auto Driver	240 (795) [495]	1,115 (350) [660]	1,355 (1,145) [1,155]
Auto Passenger	65 (220) [145]	325 (100) [195]	390 (320) [340]
Auto PuDo	5 (15) [10]	20 (5) [15]	25 (20) [25]
Transit GO	230 (820) [505]	1,140 (375) [650]	1,370 (1,195) [1,155]
Transit Local	225 (740) [475]	1,020 (305) [580]	1,245 (1,045) [1,055]
Walk	5 (15) [10]	20 (5) [15]	25 (20) [25]
Cycle	40 (155) [90]	215 (70) [125]	255 (225) [215]
Total	810 (2,760) [1,730]	3,855 (1,210) [2,240]	4,665 (3,970) [3,970]
Residential Internal Trips			
Walk	225 (350) [340]	290 (345) [355]	515 (695) [695]
Auto Driver	240 (795) [495]	1,115 (350) [660]	1,355 (1,145) [1,155]
Auto Passenger	65 (220) [145]	325 (100) [195]	390 (320) [340]
Auto PuDo	5 (15) [10]	20 (5) [15]	25 (20) [25]
Transit GO	230 (820) [505]	1,140 (375) [650]	1,370 (1,195) [1,155]
Transit Local	225 (740) [475]	1,020 (305) [580]	1,245 (1,045) [1,055]
Walk	230 (365) [350]	310 (350) [370]	540 (715) [720]
Cycle	40 (155) [90]	215 (70) [125]	255 (225) [215]
Total	1,035 (3,110) [2,070]	4,145 (1,555) [2,595]	5,180 (4,665) [4,665]

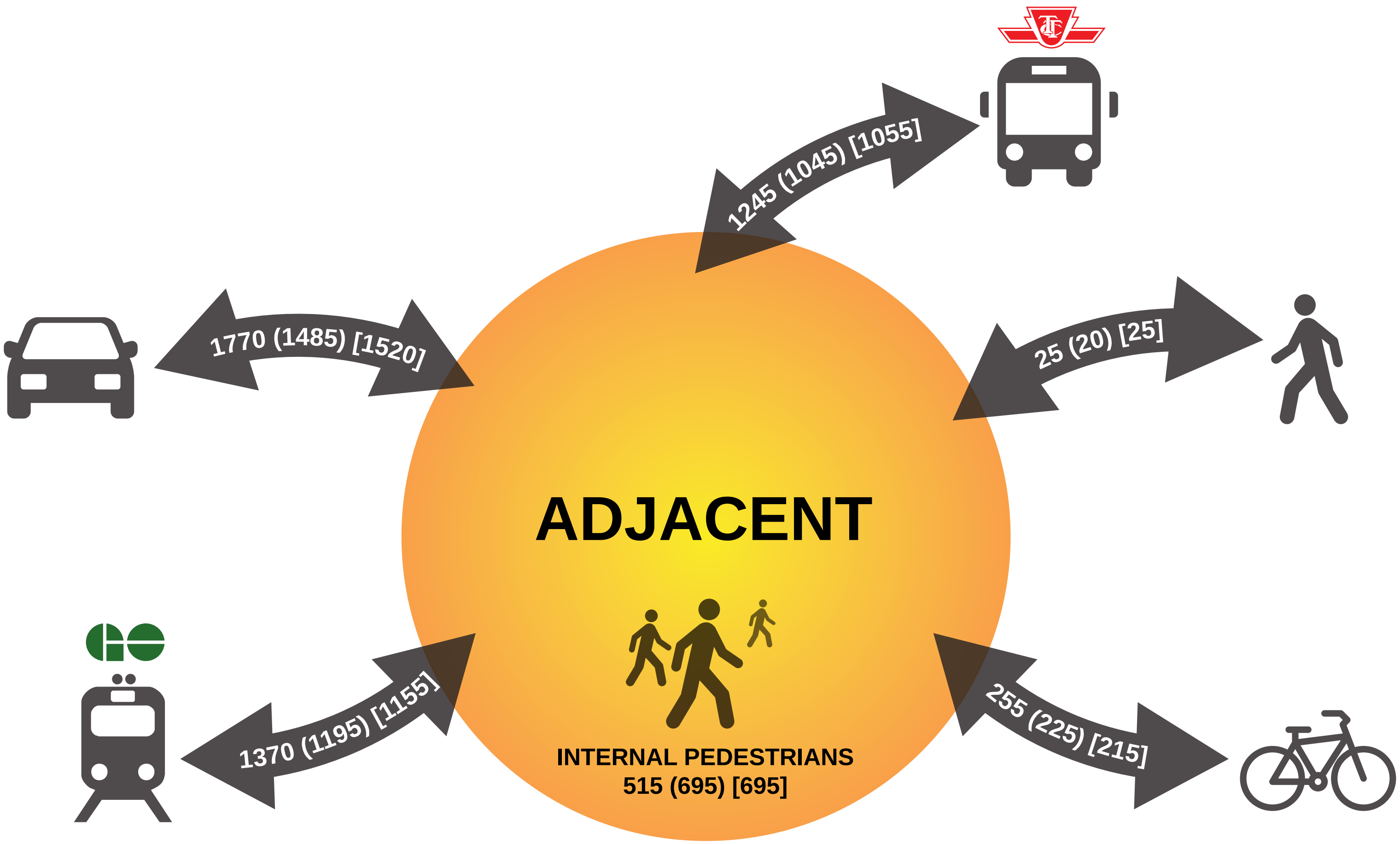


FIGURE 65 TOTAL ADJACENT TRIPS BY MODE

6.3 GREATER AREA TRAVEL DEMAND CONSIDERATIONS

This section reviews the magnitude of change in travel characteristics of existing area population with consideration given to the existing and future network with the new GO station / mobility hub. Each catchment area is summarized below.

The forecasting is based on population (census data) and TTS for travel characteristics, and the residential trip generation characteristic adopted for this study. Note that the greater area travel pattern change is based on residential trip making only.

As outlined in **Section 5.4.2**, each of the four areas considered (primary area, secondary area, tertiary area and peripheral area) have been assessed separately based on separate existing travel characteristics and projected future travel characteristics.

6.3.1 Primary Area

The Primary Area, as previously defined, includes 8,150 existing population for an equivalent of 4,180 units (based on an assumed occupancy of 1.95 persons per unit), and is shown in Figure 62.

Based on the adopted residential gross trip generation two-way person trip rate and existing population estimate above, the projected residential trips for existing development in the area are as follows:

- Weekday Morning Peak Hour: 2,090 trips
- Weekday Afternoon Peak Hour: 1,880 trips
- Saturday Peak Hour: 1,880 trips

The existing and future mode shares were outlined in **Section 5.4.2** and are illustrated in **Figure 66**.

The resulting change in trips by mode are utilized as the means of accounting for greater area shifts and are outlined in Table 59.

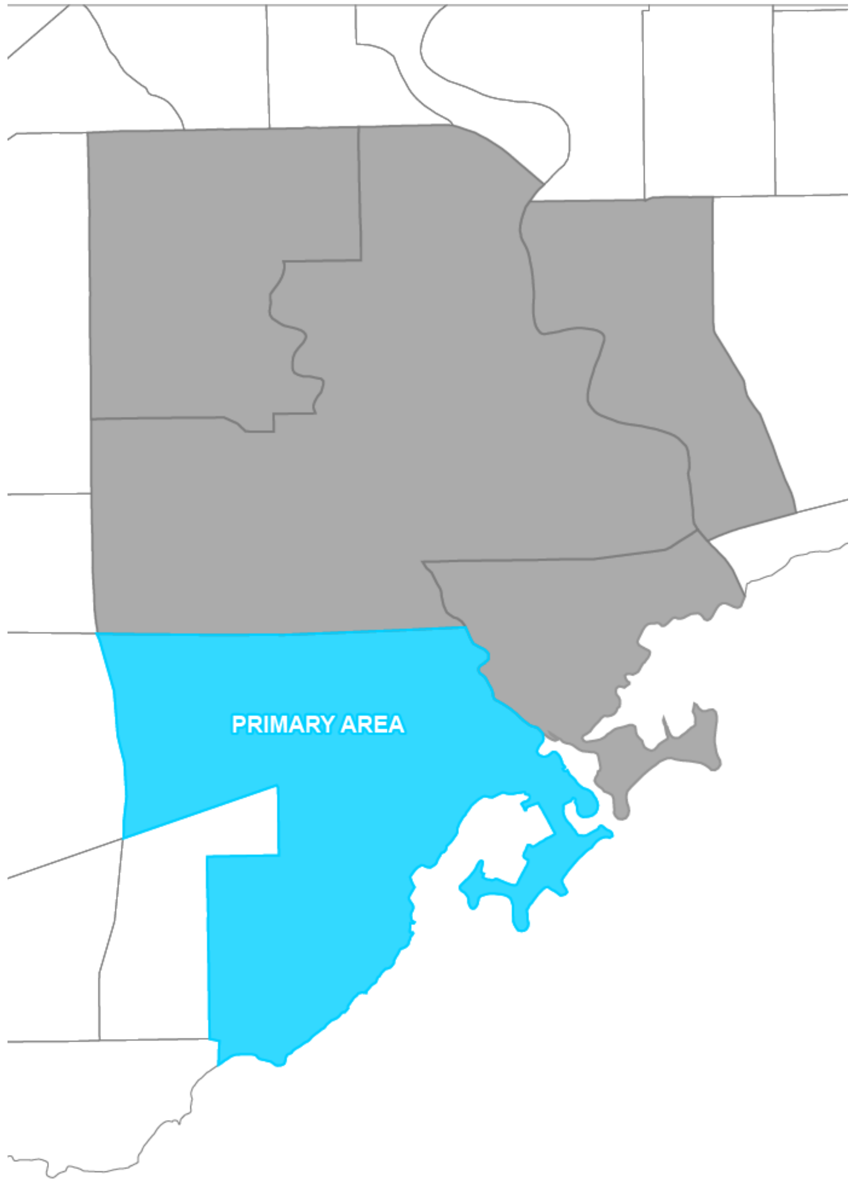


FIGURE 66A: PRIMARY AREA BOUNDARY

TABLE 59 PRIMARY AREA EXISTING DEVELOPMENT TOTAL TRIPS BY MODE

Land Use	Existing Two-Way	Future Two-Way	Difference Two-Way
Auto Driver	1,255 (1,120) [1,090]	965 (870) [845]	-290 (-250) [-245]
Auto Passenger	145 (120) [115]	155 (135) [135]	+10 (+15) [+20]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	120 (110) [120]	320 (290) [300]	+200 (+180) [+180]
Transit Local	420 (400) [425]	475 (430) [440]	+55 (+30) [+15]
Walk	105 (90) [90]	95 (85) [85]	-10 (-5) [-5]
Cycle	45 (40) [40]	80 (70) [75]	+35 (+30) [+35]
Total	2,090 (1,880) [1,880]	2,090 (1,880) [1,880]	

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The resultant overall change in vehicle trips is in the order of -250. The change to GO trips is in the order of +200.

For specific changes to the street network volumes, the distribution was considered and this is outlined in further detail in **Section 9.0**.

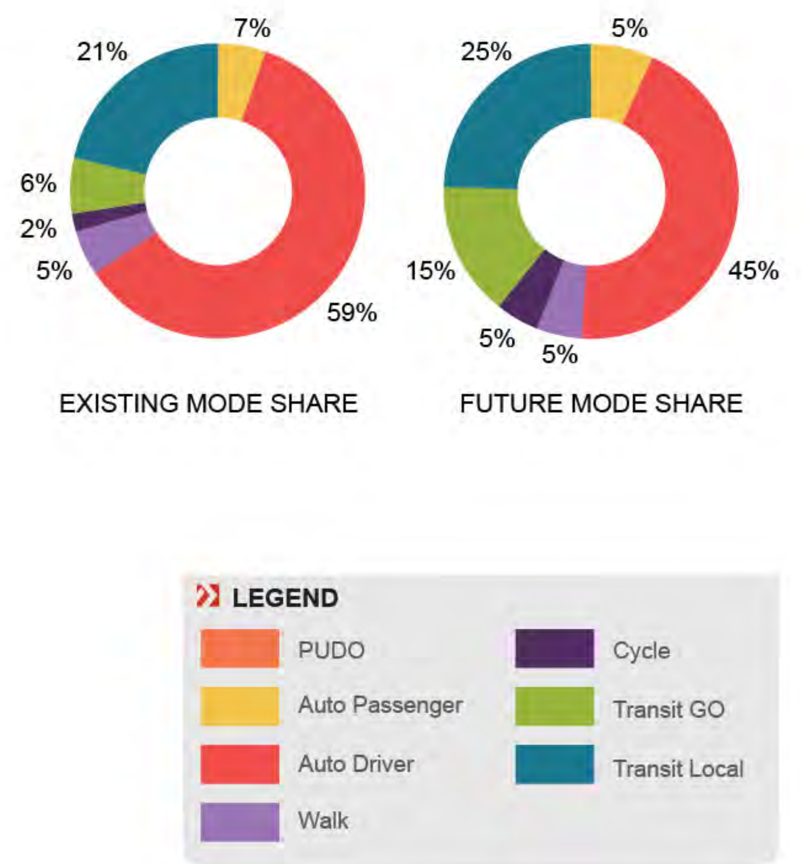


FIGURE 66B: RESULTANT AND EXISTING FUTURE MODE SHARE – PRIMARY AREA

In addition to the above, there is planned development in the primary area which has also been included in the analysis. The projected trips for these developments in outlined in **Table 60**.

TABLE 60 PRIMARY AREA PLANNED DEVELOPMENT TOTAL TRIPS BY MODE

Land Use	Inbound	Outbound	Two-Way
Auto Driver	350 (375) [260]	475 (380) [305]	825 (755) [565]
Auto Passenger	55 (40) [30]	55 (60) [40]	110 (100) [70]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	350 (150) [105]	180 (345) [130]	530 (495) [235]
Transit Local	295 (235) [145]	255 (305) [165]	550 (540) [310]
Walk	55 (40) [30]	55 (60) [35]	110 (100) [65]
Cycle	55 (35) [25]	55 (55) [35]	110 (90) [60]
Total	**1,160 (875) [595]**	**1,075 (1,205) [710]**	**2,235 (2,080) [1,305]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

6.3.2 Secondary Area

The Secondary Area, as previously defined, includes 13,500 population for an equivalent of 6,000 units (based on an assumed occupancy of 2.25 persons per unit), and is shown in **Figure 63**.

Based on the adopted residential gross trip generation two-way person trip rate and existing population estimate above, the projected residential trips for the area are as follows:

- Weekday Morning Peak Hour: 3,000 trips
- Weekday Afternoon Peak Hour: 2,700 trips
- Saturday Peak Hour: 2,700 trips

The existing and future mode shares were outlined in **Section 5.4.2** and are illustrated in **Figure 67**.

The resulting change in trips by mode are utilized as the means of accounting for greater area shifts and are outlined in **Table 61**.

TABLE 61 SECONDARY AREA TOTAL TRIPS BY MODE

Land Use	Existing Two-Way	Future Two-Way	Difference Two-Way
Auto Driver	1,550 (1,385) [1,395]	1,140 (1,030) [1,030]	-410 (-355) [-365]
Auto Passenger	205 (190) [190]	160 (145) [160]	-45 (-45) [-30]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	85 (75) [80]	555 (495) [510]	+470 (+420) [+430]
Transit Local	1,010 (915) [890]	920 (825) [785]	-90 (-90) [-105]
Walk	130 (115) [120]	90 (80) [80]	-40 (-35) [-40]
Cycle	20 (20) [25]	135 (125) [135]	+115 (+105) [+110]
Total	3,000 (2,700) [2,700]	3,000 (2,700) [2,700]	

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The resultant overall change in vehicle trips is in the order of -400. The change to GO trips is in the order of +450.

For specific changes to the street network volumes, the distribution was considered and this is outlined in further detail in **Section 9.0**.

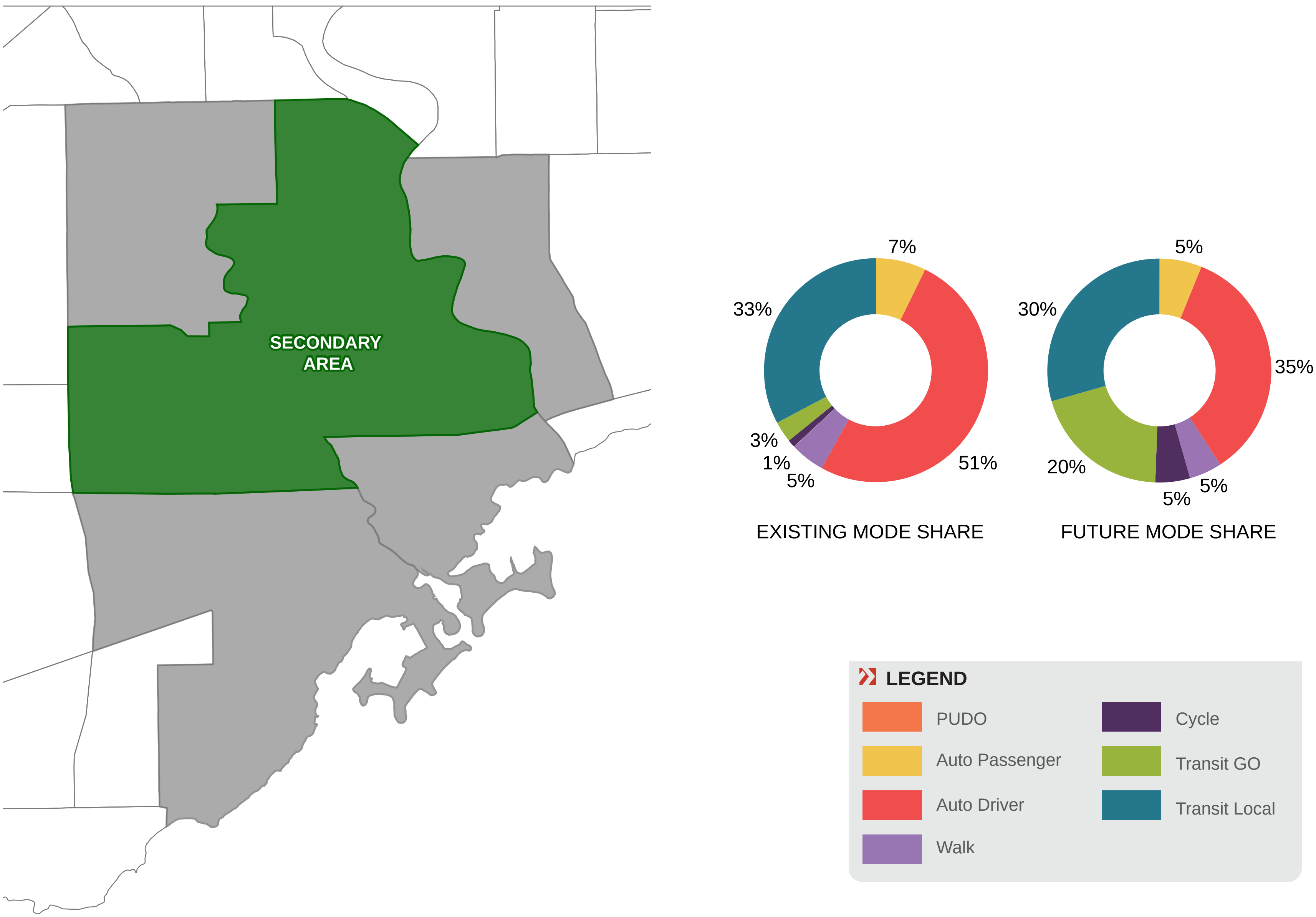


FIGURE 67 RESULTANT EXISTING AND FUTURE MODE SHARE – SECONDARY AREA

6.3.3 Tertiary Area

The Tertiary Area, as previously defined, includes 5,325 population for an equivalent of 1,935 units (based on an assumed occupancy of 2.75 persons per unit), and is shown in **Figure 68**.

Based on the adopted residential gross trip generation two-way person trip rate and existing population estimate above, the projected residential trips for the area are as follows:

- Weekday Morning Peak Hour: 970 trips
- Weekday Afternoon Peak Hour: 870 trips
- Saturday Peak Hour: 870 trips

The existing and future mode shares were outlined in **Section 5.4.2** and are illustrated in **Figure 68**.

The resulting change in trips by mode are utilized as the means of accounting for greater area shifts and are outlined in **Table 62**.

TABLE 62 TERTIARY AREA TOTAL TRIPS BY MODE

Land Use	Existing Two-Way	Future Two-Way	Difference Two-Way
Auto Driver	475 (415) [410]	340 (305) [305]	-135 (-110) [-105]
Auto Passenger	70 (70) [70]	70 (65) [60]	0 (-5) [-10]
Auto PuDo	0 (0) [0]	0 (0) [0]	0 (0) [0]
Transit GO	0 (0) [0]	100 (90) [95]	+100 (+90) [+95]
Transit Local	285 (260) [260]	290 (255) [260]	+5 (-5) [0]
Walk	130 (120) [120]	120 (105) [105]	-10 (-15) [-15]
Cycle	10 (5) [10]	50 (50) [45]	+40 (+45) [+35]
Total	970 (870) [870]	970 (870) [870]	

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The resultant overall change in vehicle trips is in the order of -100. The change to GO trips is in the order of +100.

For specific changes to the street network volumes, the distribution was considered and this is outlined in further detail in **Section 9.0**.

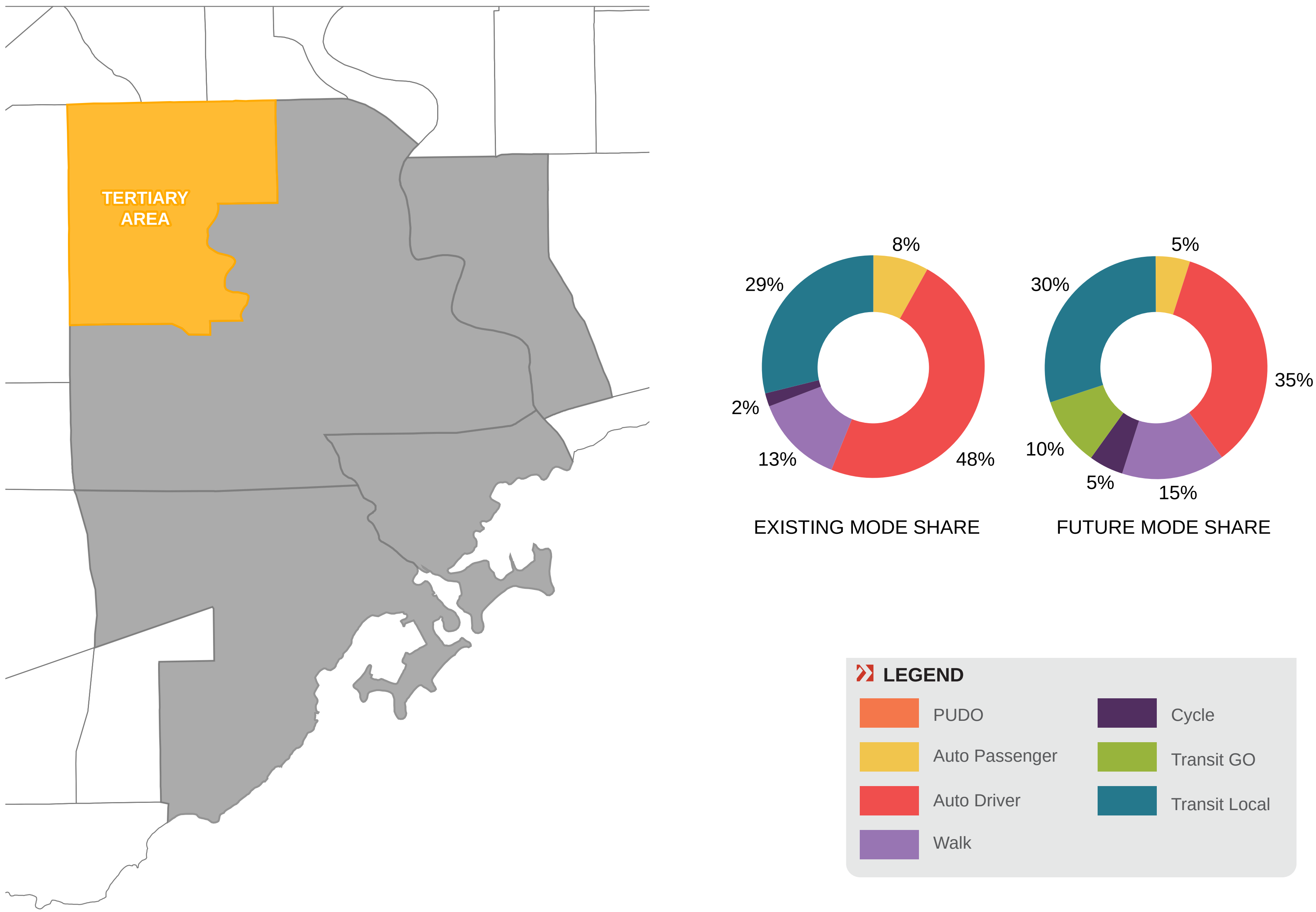


FIGURE 68 RESULTANT EXISTING AND FUTURE MODE SHARE – TERTIARY AREA

6.3.4 Peripheral Area

The Peripheral Area, as previously defined, includes 8,700 population for an equivalent of 4,145 units (based on an assumed occupancy of 2.10 persons per unit), and is shown in **Figure 69**.

Based on the adopted residential gross trip generation two-way person trip rate and existing population estimate above, the projected residential trips for the area are as follows:

- Weekday Morning Peak Hour: 2,075 trips
- Weekday Afternoon Peak Hour: 1,865 trips
- Saturday Peak Hour: 1,865 trips

The existing and future mode shares were outlined in **Section 5.4.2** and are illustrated in **Figure 69**.

The resulting change in trips by mode are utilized as the means of accounting for greater area shifts and are outlined in **Table 63**.

TABLE 63 PERIPHERAL AREA TOTAL TRIPS BY MODE

Land Use	Existing Two-Way	Future Two-Way	Difference Two-Way
Auto Driver	975 (875) [885]	835 (750) [750]	-140 (-125) [-135]
Auto Passenger	185 (165) [165]	205 (195) [195]	+20 (+30) [+30]
Auto PuDo	5 (5) [0]	0 (0) [0]	-5 (-5) [0]
Transit GO	0 (0) [0]	75 (60) [55]	+75 (+60) [+55]
Transit Local	665 (605) [595]	700 (630) [635]	+35 (+25) [+40]
Walk	155 (140) [145]	175 (150) [155]	+20 (+10) [+10]
Cycle	90 (75) [75]	85 (80) [75]	-5 (+5) [0]
Total	2,075 (1,865) [1,865]	2,075 (1,865) [1,865]	

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

The resultant overall change in vehicle trips is in the order of -150. The change to GO trips is in the order of +50.

For specific changes to the street network volumes, the distribution was considered and this is outlined in further detail in **Section 9.0**.

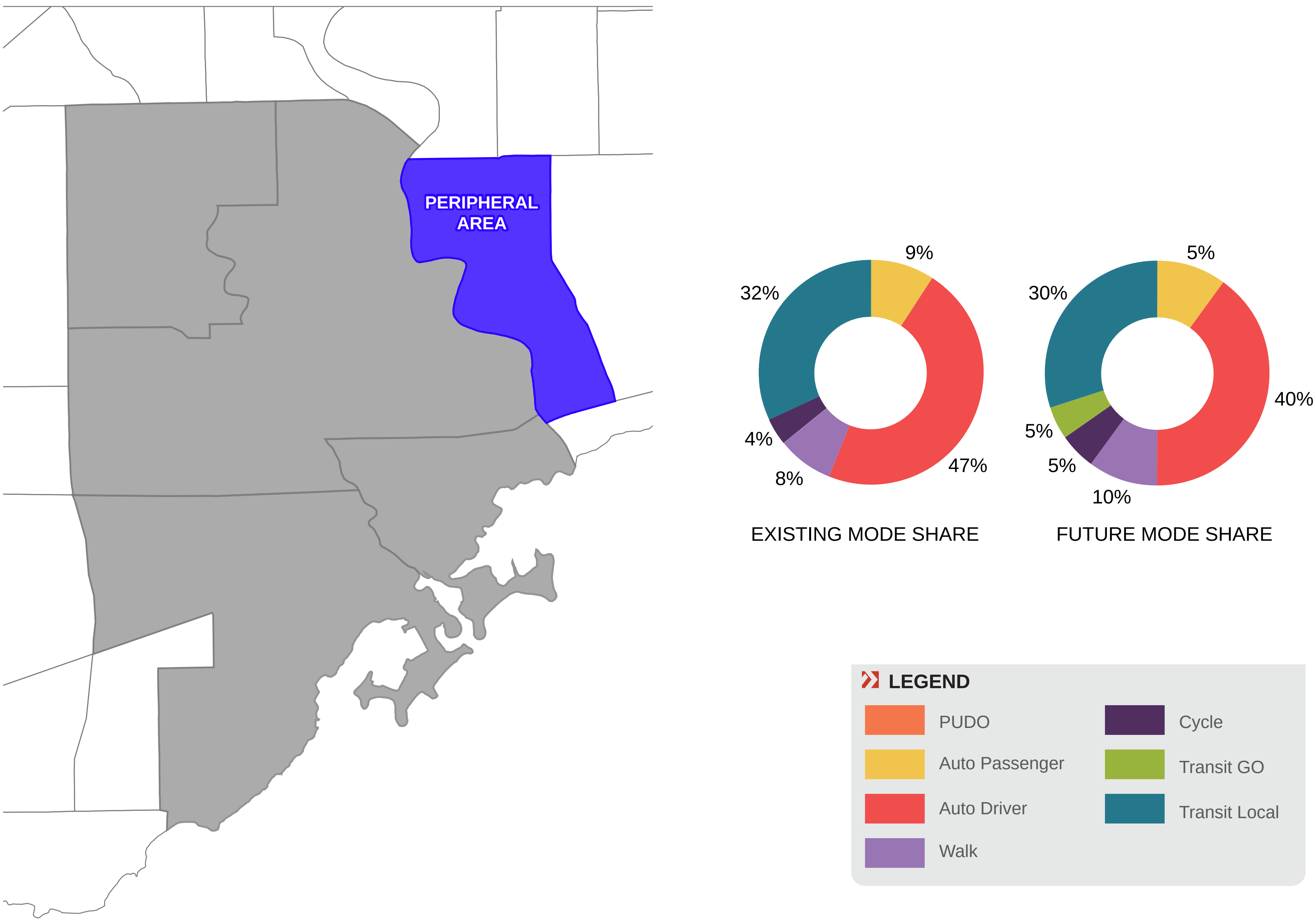


FIGURE 69 RESULTANT EXISTING AND FUTURE MODE SHARE – PERIPHERAL AREA

7.0 TRANSIT HUB ACTIVITY PROJECTIONS

7.1 PROJECTED RIDERSHIP

The Local Area and Greater Area travel demands were considered for the projection of the Park Lawn GO station activity.

As previously reviewed in **Section 5.0**, the Local Area includes:

- The Christies Site;
- Existing Humber Bay Shores population (within TTS Zone 285); and
- Planned / Proposed development within the Humber Bay Shores and adjacent community.

The Greater Area includes:

- Primary Area Existing Populations (TTS Zones 286-288)
- Primary Area Planned Populations
- Secondary Area Existing Populations (TTS Zones 301-305)
- Tertiary Area Existing Populations (TTS Zones 306 and 315)
- Peripheral Area Existing Populations (TTS Zone 122)

The travel demand forecasting for each area is discussed, in detail in **Section 6.0**, which considers the impact of the transportation infrastructure to be delivered as part of the development Master Plan, including the new Park Lawn GO station.

The resulting GO transit ridership for each area is re-summarized in the **Table 64** and the local area projected ridership demands is shown graphically in **Figure 70**.

As summarized in **Table 64,** the station activity is projected at 3,825, 3,425 and 3,345 two-way transit trips during the weekday morning, afternoon, and Saturday peak hours, respectively.

TABLE 64 GO TRANSIT RIDERSHIP FORECAST

	Inbound	Outbound	Two-Way
Local Area			
Site	395 (680) [495]	875 (495) [610]	1,270 (1,175) [1,105]
Existing	155 (545) [345]	760 (240) [445]	915 (785) [790]
Planned	75 (275) [160]	380 (135) [205]	455 (410) [365]
Total	**625 (1,500) [1,000]**	**2,015 (870) [1,260]**	**2,640 (2,370) [2,260]**
Greater Area			
Primary Existing	65 (190) [135]	255 (100) [165]	320 (290) [300]
Primary Planned	20 (80) [50]	115 (40) [75]	135 (120) [125]
Secondary	115 (325) [225]	440 (170) [285]	555 (495) [510]
Tertiary	20 (60) [35]	80 (30) [60]	100 (90) [95]
Peripheral	15 (40) [20]	60 (20) [35]	75 (60) [55]
Total	**235 (695) [465]**	**950 (360) [620]**	**1,185 (1,055) [1,085]**
Total Ridership			
Local Area	625 (1,500) [1,000]	2,015 (870) [1,260]	2,640 (2,370) [2,260]
Greater Area	235 (695) [465]	950 (360) [620]	1,185 (1,055) [1,085]
Total	**860 (2,195) [1,465]**	**2,965 (1,230) [1,880]**	**3,825 (3,425) [3,345]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

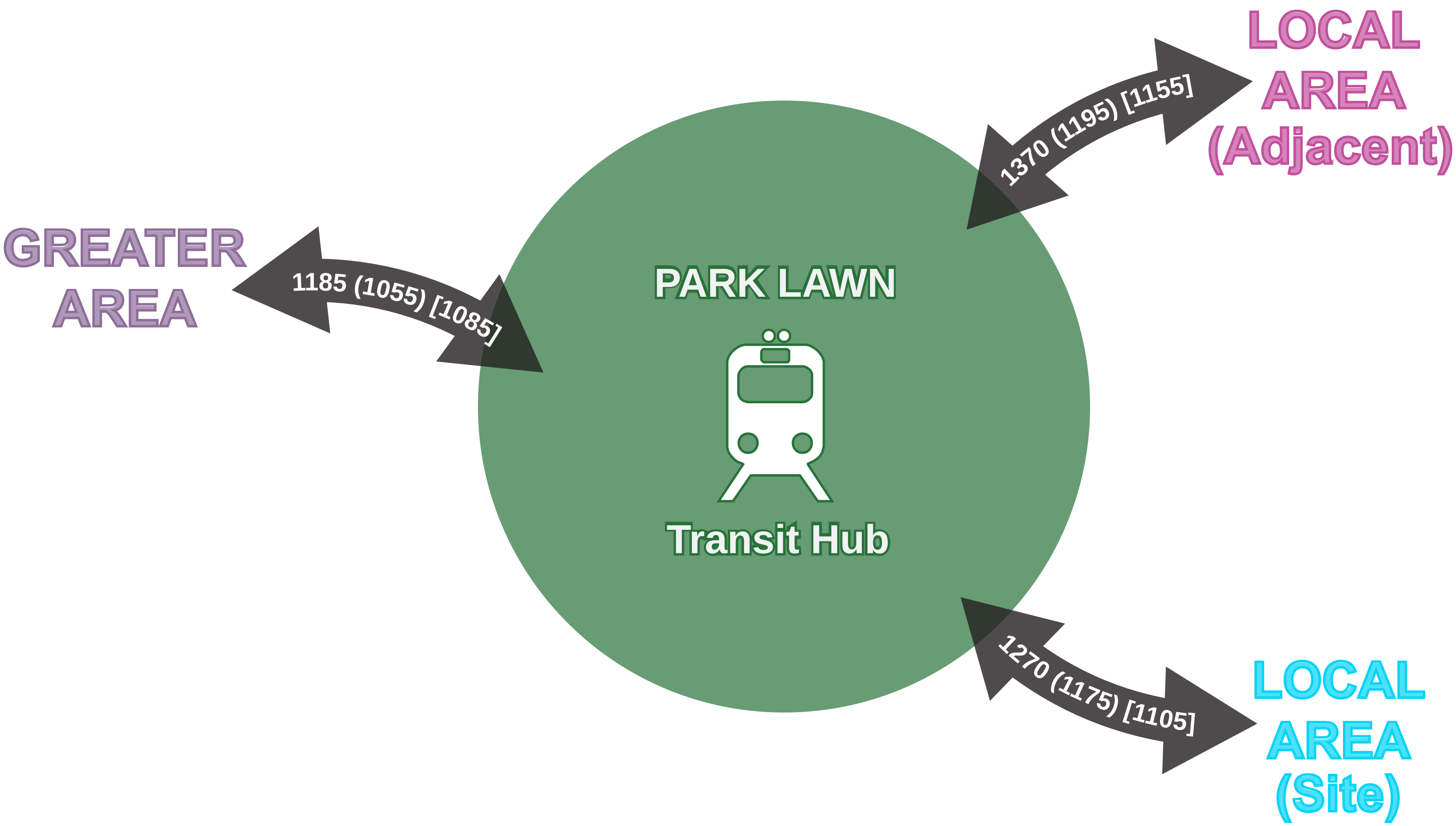


FIGURE 70 TOTAL PROJECTED HUB ACTIVITY

7.2 TOTAL HUB ACTIVITY

Based on the ridership projections made in **Section 6.0** and re-summarized in **Table 67** above, the station activity is projected at:

- 3,825 two-way GO trips during the AM peak hour
- 3,425 two-way GO trips during the PM peak hour
- 3,345 two-way GO trips during the Saturday peak hour

To understand the total activity that this generates, one has to consider how future GO riders are traveling to / from the new station. The ridership will generate a level of pedestrian, cycling, and local transit activity through the various means that riders travel to / from the station.

The mode split assumptions and resultant trip numbers to and from the GO station is outlined in **Table 65**. The assumptions are based primarily on proximity to the Site and available transit routes.

Comparisons were made to surveys previously undertaken at Exhibition Station of transportation mode to and from the station. The data for Exhibition Station indicated a high walk mode share in the order of 80%, with approximately 15% using local transit and 5% being picked up or dropped off.

The above is generally consistent with the overall mode split outlined in **Table 65**, with the exception of local transit being slightly higher to service residents within the greater area catchments.

Existing ridership on the Lakeshore West Line at Mimico Station is in the order of 3,000 passengers per hour in the eastbound direction during the AM peak and in the order of 2,200 passengers per hour in the westbound direction during the PM peak. A more detailed review of existing and future ridership along the line is undertaken in **Section 8.0**.

TABLE 65 PROJECTED TWO-WAY TRAVEL MODES TO/FROM STATION

	Streetcar 501	Bus 80	Bus 66	Bus 77	Walk	Bicycle	Pick Up/Drop Off	Total
Local Area Residential	<u>5%</u> *120 (100) [100]*			<u>5%</u> *120 (100) [100]*	<u>85%</u> *2,005 (1,745) [1,705]*	<u>5%</u> *120 (100) [100]*		<u>100%</u> *2,365 (2,045) [2,005]*
Local Area Non-Residential					<u>100%</u> *275 (325) [255]*			<u>100%</u> *275 (325) [255]*
Primary Area	<u>65%</u> *295 (265) [275]*				<u>20%</u> *90 (85) [85]*	<u>5%</u> *25 (20) [20]*	<u>10%</u> *45 (40) [45]*	<u>100%</u> *455 (410) [425]*
Secondary Area		<u>25%</u> *140 (125) [125]*	<u>45%</u> *250 (220) [230]*		<u>15%</u> *85 (75) [75]*	<u>5%</u> *25 (25) [25]*	<u>5%</u> *55 (50) [55]*	<u>100%</u> *555 (495) [510]*
Tertiary Area			<u>70%</u> *70 (60) [65]*			<u>5%</u> *5 (5) [5]*	<u>25%</u> *25 (25) [25]*	<u>100%</u> *100 (90) [95]*
Peripheral Area				<u>70%</u> *50 (45) [40]*		<u>5%</u> *5 (0) [0]*	<u>25%</u> *20 (15) [15]*	<u>100%</u> *75 (60) [55]*
Total	<u>10%</u> *415 (365) [375]*	<u>5%</u> *140 (125) [125]*	<u>10%</u> *320 (280) [295]*	<u>5%</u> *170 (145) [140]*	<u>60%</u> *2,455 (2,230) [2,120]*	<u>5%</u> *180 (150) [150]*	<u>5%</u> *145 (130) [140]*	<u>100%</u> *3,825 (3,425) [3,345]*

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

7.2.1 Transit Hub Design Considerations

The assessment of the transit hub ridership modal split provides guidance to the design and location of the transit hub components. These station components, summarised here, are discussed in further detail in **Section 4.0**.

Transit Considerations

In the order of 30% of the passengers will be using local surface transit facilities (i.e. bus and streetcar / LRT) to travel to / from the station. Consequently, more emphasis was placed on the design to improve the ease of transfers between the bus stops and streetcar platforms and the GO platforms. An underground tunnel on the concourse mezzanine level will connect the GO platform vertical circulation elements to the three (3) bus platforms and the at-grade streetcar platforms. The proximity of the bus platforms and streetcar platforms relative to the station also helps reduce the walking / transfer distance between the various modes of public transportation and make the station more attractive and navigable.

Cycling Considerations

The cycling mode share travelling to / from the transit hub is expected to grow to 5% of the all trips, or approximately 150 to 200 trips in the peak hours. High quality, connected cycling facilities provided to the station bicycle parking facilities will help support the anticipated demand and make cycling a viable first and last mile mode of transportation. Dedicated off-road cycling routes on the Loop Road (two-way cycle track) and on the Relief Road (multi-use path) provide safe and direct routes to the station precinct. A dedicated station bicycle parking facility on the mezzanine concourse level will be sized accordingly to provide sufficient capacity for commuter cyclists wishing to make cycling their mode of choice for travel to / from the transit hub. The combination of new connected cycling routes and end of trip facilities (i.e. bicycle parking) will help foster the growth of cycling as a mode of choice for the area population to travel to / from the transit hub.

Pedestrian Considerations

The majority of transit hub users (GO train riders) will be walking to / from the station. A permeable, porous master plan and exceptional public realm will make walking an attractive and safe option for those living within the 2150 Lake Shore Boulevard West property, and those from the Humber Bay Shores neighbourhood to the south. New signalised pedestrian crossings along Lake Shore Boulevard West and Park Lawn Road improve the ability for pedestrians to cross the road safety.

Wide pedestrian clearways (minimum 3.0 metres wide) throughout the Site provide sufficient width to handle the anticipated levels of pedestrian activity. Additionally, traffic calming measures undertaken within the Site along the Loop Road will help foster the creation of a pleasant, walkable neighbourhood.

The transit hub will have multiple points of access for pedestrian from the community, including entrances on Park Lawn Road, on Loop Road, and from the Relief Road, improving connectivity.

The quality of the pedestrian infrastructure being provided as part of the 2150 Lake Shore Boulevard West development will place priority on the pedestrian experience and comfort, to help facilitate the modal choices anticipated.

Pick-up / Drop-off Considerations

On-street short-term parking laybys and a formal pick-up / drop-off facility located within the P1 level of the underground garage will provide the ability of the limited levels of this activity to occur. The underground pick-up / drop-off facility will be directly linked to the concourse mezzanine level, and be fully weather protected. Vehicular access to / from the facility will be provided via the Relief Road and Park Lawn Road.

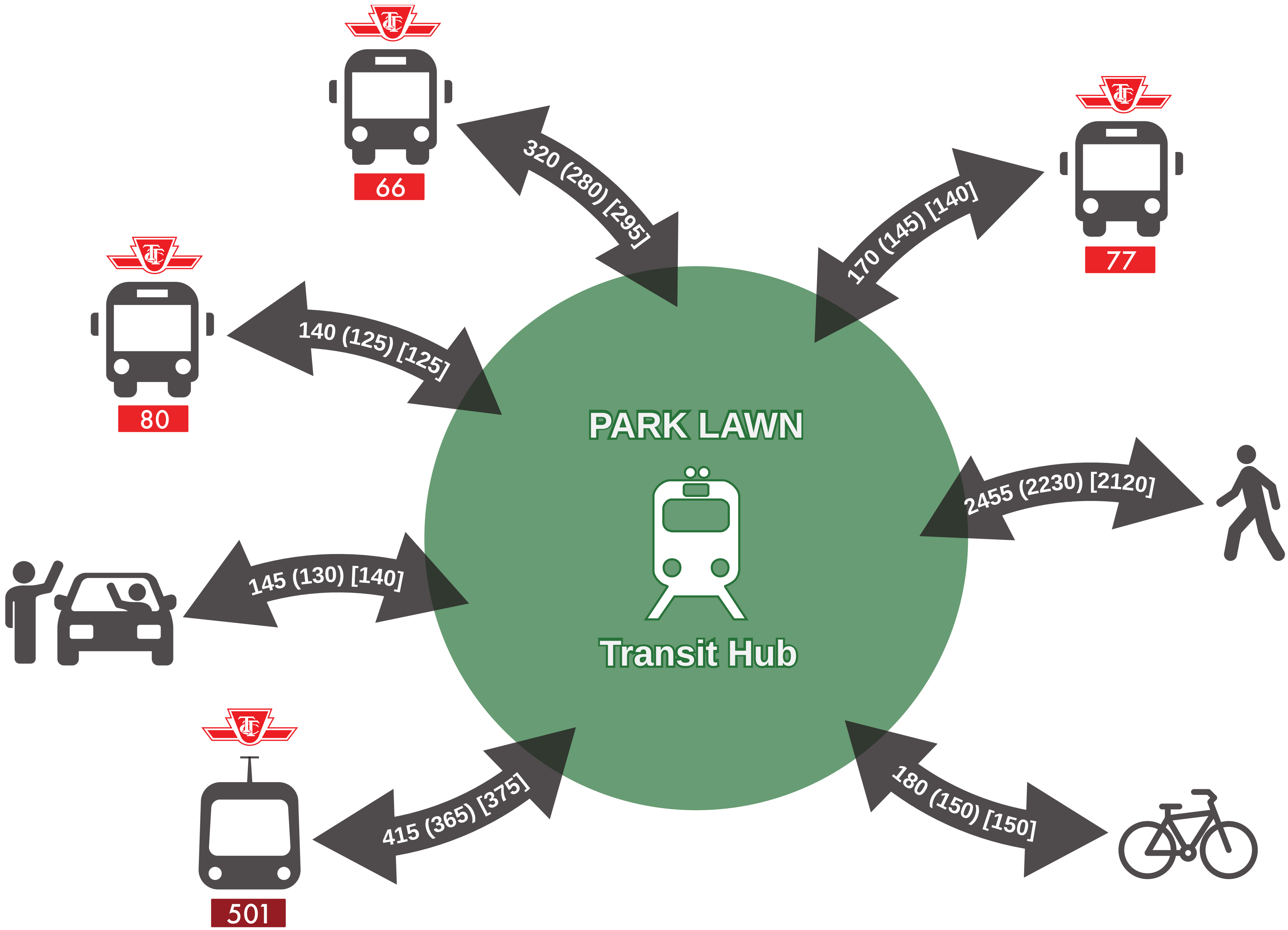


FIGURE 71 PROJECTED HUB ACTIVITY BY MODE

8.0 TRANSIT TRAVEL ASSESSMENT

8.1 APPROACH

BA Group has undertaken a review of the area transit travel conditions under existing and future conditions. As part of this assessment, the following has been considered:

- Overview of the existing and future area transit network and services;
- Summary of the existing transit operations and capacity considerations including a review of existing ridership data by transit service in the Site-surrounding area;
- Summary of projected ridership as a result of background growth and Site redevelopment; and
- Review of existing transit facility conditions and capacity to accommodate new Site related public transportation demand.

BA Group has conducted a review of existing area transit ridership and capacities during the weekday peak hours, with consideration given to the forecast Site transit trips and their accommodation on the respective transit services.

Transit ridership data used as the basis of the review is provided in **Appendix B**.

8.2 TRANSIT NETWORK

8.2.1 Existing Network Services

The Site, as well as the surrounding area, currently receives transit service through streetcar and bus services operated by the Toronto Transit Commission (TTC). While the 2150 Lake Shore Site is immediately adjacent to the rail corridor used by the GO Transit's Lakeshore West Service, the nearest station stop at Mimico is approximately 2 km to the west.

The existing area transit network is summarized in **Table 67** and is shown in **Figure 68**.

Travel Times

Four transit services in the vicinity of the Site provide a connection to Downtown Toronto: Route 66 Bus with a connection to the Line 2 Subway, the 145 Express Bus, the 176 bus with a connection to the Lakeshore West GO line, and the 501 streetcar.

Table 66 summarizes the average peak hour travel times for these transit services in comparison to the car with an origin at the Site and a destination in downtown Toronto (assuming a destination at the intersection of King Street and Bay Street).

TABLE 66 TRAVEL TIMES FROM THE SITE TO DOWNTOWN TORONTO

Route Description	Travel Time in the AM Peak
via 66 Bus to Line 2 Subway	55-60 minutes
via 145 Express Bus	50-55 minutes
via 501 Streetcar	50-55 minutes
via 176 Bus to Mimico Station Lakeshore West Go Train to Union	40-45 minutes
via Gardiner Expressway	20-40 minutes

Note:
1. Destination has been set as the intersection of King Street and Bay Street

Based on typical weekday morning peak hour travel times, there is currently a significant travel time disadvantage to taking transit to downtown Toronto.

TABLE 67 EXISTING TRANSIT NETWORK

Route		Closest Stop	Typical Peak Hour Headways	Route Description
GO Rail	Lake Shore West Line	Mimico GO Station	Approx. 30 mins in peak direction	West Harbour GO Station and Hamilton GO Centre (Hamilton, Ontario) are the western terminals, with an eastern terminal at Union Station.
Streetcar	501 – Queen	Lake Shore Boulevard West / Park Lawn Road	Approx. 10 mins	Operates between Neville Park Loop and Long Branch Loop, generally in an east-west direction. It serves Queen and Osgoode Stations on Line 1 Yonge-University. East of the Site, the Humber Loop provides a turnaround point for the 501 Streetcar to turn back as operational conditions require.
	508 – Lake Shore	Lake Shore Boulevard West / Park Lawn Road	Approx. 20 mins	Operates between Long Branch Loop and the area of King Street East and Parliament Street, generally in an east-west direction. It also serves the St. Andrew and King Stations on Line 1 Yonge-University.
Bus	66B – Prince Edward	Lake Shore Boulevard West / Park Lawn Road	Approx. 8-9 mins	Operates between Old Mill Station on Line 2 Bloor-Danforth, the area of The Queensway and Stephen Drive, and the area of Lake Shore Boulevard West, Park Lawn Road, and Marine Parade, generally in a north-south direction.
	77 - Swansea	The Queensway / South Kingsway	Approx. 9-10 mins	Operates between Runnymede Station on the Bloor-Danforth Subway and the area of The Queensway and South Kingsway, generally in a north-south direction
	80 - Queensway	The Queensway / Park Lawn Road	Approx. 30 mins	Operates between the Sherway Gardens shopping mall, the area of The Queensway and Stephen Drive, and Keele Station on Line 2 Bloor-Danforth, generally in an east-west direction.
	145 – Downtown / Humber Bay Express	Lake Shore Boulevard West / Park Lawn Road	Approx. 30 mins	Operates between the Humber Bay area in south Etobicoke and the Downtown Toronto area, generally in an east-west direction. It also passes within one block of the Queen, Osgoode, St Andrew and King Stations on Line 1 Yonge-University.
	176 – Mimico GO	Lake Shore Boulevard West / Park Lawn Road	Approx. 30 mins	Operates between Mimico GO Station and Lake Shore Loop, generally in an east-west direction.

FIGURE 72 EXISTING TRANSIT NETWORK

8.2.2 Future Network Services

A number of significant transportation network improvements are planned or underway in Toronto's west end that will create significant opportunities for area residents, employees and visitors to access municipal and regional higher order transit services.

Area residents currently make use of public transit as their primary means of travel during the weekday peak periods (transit modal share in the order of 30 percent), notwithstanding existing challenges in the area transit network. Infrastructure improvements and increased accessibility to high quality rapid transit services will facilitate a greater shift to non-automobile based travel modes.

The confluence of various transit services within the emerging Park Lawn transit district, particularly the introduction of GO RER and station infrastructure improvements, will increase the transit reach to / from the Site and significantly improve the travel time to and from downtown Toronto.

The future transit network is illustrated in **Figure 73**.

The future conditions of the Site will house the implementation of new transportation infrastructure such as:

- Construction of the new Park Lawn GO station which will operate on the Lakeshore West Line;
- Relocation of the Humber Loop to the Site transit hub to accommodate area streetcar and bus routes;
- Construction of a new LRT right-of-way as a part of the Waterfront Transit Reset; and
- Construction of a new road connections (Relief Road) which will support new bus stops.

FIGURE 73 FUTURE TRANSIT NETWORK

8.3 EXISTING CONDITIONS

8.3.1 Availability and Access Considerations

The above section outlined the transit services in the Site-surrounding area. The Site currently has convenient access to the following routes:

- **TTC Streetcar Route 501**, with stops located immediately adjacent to the Site on Lake Shore Boulevard West
- **TTC Streetcar Route 508**, with stops located immediately adjacent to the Site on Lake Shore Boulevard West
- **TTC Bus Route 66B**, with bus stops located immediately adjacent the Site on Park Lawn Road and on Lake Shore Boulevard West
- **TTC Bus Route 145**, with bus stops located immediately adjacent the Site on Lake Shore Boulevard West
- **TTC Bus Route 176**, with bus stops located immediately adjacent the Site on Park Lawn Road and on Lake Shore Boulevard West

Additional transit routes operate in the Site vicinity, albeit not directly adjacent the Site, including:

- **TTC Bus Route 77**, with the nearest stop located an approximate 1.2 kilometre walk to the northeast of the Site at The Queensway / South Kingsway
- **TTC Bus Route 80**, with the nearest stop located an approximate 500 metre walk to the north of the Site at Park Lawn Road / The Queensway
- **Lakeshore West GO Train Service**, available via Mimico Station, located an approximate 2 kilometre walk to the west of the Site.

8.3.2 Operations and Capacity Considerations

An overview of the existing transit capacities by service and route is provided on the basis of ridership data (attached in **Appendix B**).

On the basis of the provided data, the assumed capacity of each relevant bus route is outlined in **Table 68**.

It is noted that for the purpose of analysis, the following capacity assumptions:

- Streetcar route 501 was assumed to operate with a capacity of 74 people;
- All bus routes were assumed to operate with a standard TTC bus with a capacity of 51 people; and
- GO capacity per train varies depending on the number of carriages. The hourly capacity was based on ridership data and is outlined in **Table 68**.

It is noted that recent Saturday data was only available for bus routes 77 and 80. It is also noted that streetcar route 508 was recently reinstated and data was therefore not sourced for this route.

TABLE 68 TRANSIT ROUTE CAPACITIES

Route	Direction	AM Peak			PM Peak			Saturday Peak[1]		
		Number of Vehicles	Vehicle Capacity	Hourly Capacity	Number of Vehicles	Vehicle Capacity	Hourly Capacity	Number of Vehicles	Vehicle Capacity	Hourly Capacity
66	Northbound	7	51	357	5	51	255	3	51	153
	Southbound	6	51	306	6	51	306	3	51	153
77	Northbound	7	51	357	7	51	357	3	51	153
	Southbound	7	51	357	7	51	357	3	51	153
80	Eastbound	3	51	153	3	51	153	3	51	153
	Westbound	3	51	153	3	51	153	3	51	153
145	Eastbound	2	51	102	-[2]			-[2]		
	Westbound	2	51	102	3	51	153	-[2]		
176	Eastbound	2	51	102	2	51	102	-[2]		
	Westbound	3	51	153	3	51	153	-[2]		
501	Eastbound	11	74	814	10	74	740	6	74	444
	Westbound	10	74	740	10	74	740	6	74	444
508[4]	Eastbound	3	74	222	-[2]			-[2]		
	Westbound	-[2]			3	74	222	-[2]		
Lake Shore West GO Train Line	Eastbound	3	-[3]	4,928	2	-[3]	3,388	2	1,540[3]	3,080
	Westbound	3	-[3]	4,620	2	-[3]	3,080	2	1,540[3]	3,080

Notes:
1. Recent Saturday data only available for bus routes 77 and 80. Remaining routes estimated based on online schedules
2. No service during this period according to provided data or online schedule
3. Train capacity varies with number of train carriages and carriage type, with total hourly capacity available via GO data. For Saturday, capacity of 1,540 per train is assumed.
4. Route was recently reinstated and data was therefore not sourced. Capacity estimated based on online schedules

Lakeshore West GO Line

The Lakeshore West GO line operates from West Harbour GO Station and Hamilton GO Centre (Hamilton, Ontario) at the western terminals to Union Station at the eastern terminal. Existing ridership data and capacity analysis at Mimico GO Station is summarized in **Table 69**. It is noted that recent Saturday data was not available.

Street Car Route 501

Streetcar route 501 (Queen) operates between Neville Park Loop and Long Branch Loop, generally in an east-west direction. Existing ridership data and capacity analysis at the Lake Shore Boulevard West / Park Lawn Road intersection is summarized in **Table 70**. It is noted that recent Saturday data was not available.

TABLE 69 LAKESHORE WEST GO LINE CAPACITY ANALYSIS AT MIMICO GO STATION – EXISTING CONDITIONS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Eastbound	4,928	2,487	**0.50**	4,928	3,000	**0.61**	3,388	591	**0.17**	3,388	618	**0.18**
Westbound	4,620	352	**0.08**	4,620	361	**0.08**	3,080	2,176	**0.71**	3,080	1,854	**0.60**

Notes:
1. Recent Saturday data not available.

TABLE 70 STREETCAR ROUTE 501 CAPACITY ANALYSIS AT LAKE SHORE BOULEVARD WEST / PARK LAWN ROAD – EXISTING CONDITIONS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Eastbound	814	267	**0.33**	814	285	**0.35**	740	172	**0.23**	740	151	**0.20**
Westbound	740	105	**0.14**	740	131	**0.18**	740	298	**0.40**	740	294	**0.40**

Notes:
1. Recent Saturday data not available.

Bus Route 66

Bus route 66 (Prince Edward) operates between Old Mill Station on Line 2 Bloor-Danforth, the area of The Queensway and Stephen Drive, and the area of Lake Shore Boulevard West, Park Lawn Road, and Marine Parade, generally in a north-south direction. Existing ridership data and capacity analysis at the Lake Shore Boulevard West / Park Lawn Road intersection is summarized in **Table 71**. It is noted that recent Saturday data was not available.

Bus Route 145

Bus route 145 (Downtown/Humber Bay Express) operates between the Humber Bay area in south Etobicoke and the Downtown Toronto area, generally in an east-west direction. It also passes within one block of the Queen, Osgoode, St Andrew and King Stations on Line 1 Yonge-University. Existing ridership data and capacity analysis at the Lake Shore Boulevard West / Park Lawn Road intersection is summarized in **Table 72**. It is noted that recent Saturday data was not available.

TABLE 71 BUS ROUTE 66 CAPACITY ANALYSIS AT LAKE SHORE BOULEVARD WEST / PARK LAWN ROAD – EXISTING CONDITIONS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Northbound	357	82	**0.23**	357	218	**0.61**	255	21	**0.08**	255	67	**0.26**
Southbound	306	42	**0.14**	306	21	**0.07**	306	159	**0.52**	306	70	**0.23**

Notes:
1. Recent Saturday data not available.

TABLE 72 BUS ROUTE 145 CAPACITY ANALYSIS AT LAKE SHORE BOULEVARD WEST / PARK LAWN ROAD – EXISTING CONDITIONS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Eastbound	102	44	**0.43**	102	56	**0.55**	-			-		
Westbound	102	2	**0.02**	102	1	**0.01**	153	32	**0.21**	153	18	**0.12**

Notes:
1. Recent Saturday data not available.

Bus Route 77

Bus route 77 (Swansea) operates between Runnymede Station on the Bloor-Danforth Subway and the area of The Queensway and South Kingsway, generally in a north-south direction.

Existing ridership data and capacity analysis at the Windermere Avenue / Windermere Place intersection is summarized in **Table 73**.

Bus Route 80

Bus route 80 (Queensway) operates between the Sherway Gardens shopping mall, the area of The Queensway and Stephen Drive, and Keele Station on Line 2 Bloor-Danforth, generally in an east-west direction.

Existing ridership data and capacity analysis at the Queensway / Park Lawn Road intersection is summarized in **Table 74.**

Bus Route 176

Bus route 176 (Mimico GO) operates between Mimico GO Station and Lake Shore Loop, generally in an east-west direction.

Existing ridership data and capacity analysis at the Lake Shore Boulevard West / Park Lawn Road intersection is summarized in **Table 75**. It is noted that recent Saturday data was not available.

TABLE 73 BUS ROUTE 77 CAPACITY ANALYSIS AT WINDERMERE AVENUE / WINDERMERE PLACE – EXISTING CONDITIONS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Northbound	357	129	**0.36**	357	207	**0.58**	357	19	**0.05**	357	43	**0.12**
Southbound	357	130	**0.36**	357	129	**0.36**	357	27	**0.08**	357	26	**0.07**
	Saturday Peak											
Northbound	153	40	**0.26**	153	57	**0.37**						
Southbound	153	46	**0.30**	153	46	**0.30**						

Table 74 Bus Route 80 Capacity Analysis at The Queensway / Park Lawn Road – Existing Conditions

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Eastbound	153	43	**0.28**	153	42	**0.27**	153	56	**0.37**	153	50	**0.33**
Westbound	153	79	**0.52**	153	84	**0.55**	153	41	**0.27**	153	48	**0.31**
	Saturday Peak											
Eastbound	153	54	**0.35**	153	41	**0.27**						
Westbound	153	58	**0.38**	153	68	**0.44**						

Table 75 Bus Route 176 Capacity Analysis at Lake Shore Boulevard West / Park Lawn Road – Existing Conditions

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Eastbound	102	8	**0.08**	102	2	**0.02**	102	11	**0.11**	102	2	**0.02**
Westbound	153	6	**0.04**	153	9	**0.06**	153	4	**0.03**	153	4	**0.03**

8.4 TRANSIT RIDERSHIP PROJECTIONS

8.4.1 Overview

The following sections consider future transit trip generation from four sources, summarized as follows:

- Local and GO Transit trips associated with background developments
- Local and GO Transit trips associated with the proposed Site development
- GO Transit trips associated with existing residents in the Local and Greater Areas
- Local Transit trips associated with existing and future residents travelling to and from the GO Station

8.4.2 Background / Growth Considerations

As part of the multi-modal assessment in this report, BA Group has developed a transit demand forecast as it relates to the proposed development. Background growth transit trips were projected based on the expected transit trip generation associated with area background developments, consistent with those outlined in **Section 6.0**, including the developments within both the Local Area and the Greater Area.

Background developments are projected to generate in the order of 2,475, 2,255 and 1,770 total transit trips during the morning, afternoon and Saturday peak hours respectively. These will be distributed across multiple transit routes, including routes outside of the study area.

Background transit trips were generally assigned to routes using the same transit trip distributions adopted for the subject Site. The resultant projected background transit ridership as it relates to capacity at the proposed transit hub are outlined in **Table 76.**

It is noted that the analysis has been undertaken on the basis of accumulation of transit riders and therefore does not include background transit trips projected to get on after the proposed transit hub or get off before the proposed transit hub. The assignment also does not include background ridership attributed to transit routes outside of the study area.

TABLE 76 PROJECTED BACKGROUND TRANSIT RIDERSHIP BY TRANSIT ROUTE (ACCUMULATION AT LOCAL AREA STOP)

Direction	AM Peak		PM Peak		SAT Peak	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
Lakeshore West GO Line						
EB	150	640	330	495	105	385
WB	445	355	485	140	300	90
Streetcar Route 501						
EB	180	330	150	185	130	215
WB	160	140	255	150	175	105
Bus Route 66						
NB	0	200	0	125	0	125
SB	115	0	160	0	110	0
Bus Route 77						
NB	0	70	0	20	0	40
SB	20	0	50	0	35	0
Bus Route 80						
EB	0	35	0	10	0	25
WB	5	0	25	0	20	0

8.4.3 Site Transit Volumes

The projected Site transit trips are summarized in **Table 77** and **Table 78** for local transit and GO transit trips respectively.

TABLE 77 PROJECTED SITE LOCAL TRANSIT DEMANDS

Land Use	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Primary Trips									
Residential	155	710	865	505	230	735	325	405	730
Office	115	30	145	25	100	125	25	30	55
Retail	25	15	40	65	65	130	165	170	335
Hotel	40	50	90	40	50	90	40	50	90
Total	**335**	**805**	**1140**	**635**	**445**	**1080**	**555**	**655**	**1210**
Pass-by Trips									
Retail	0	0	0	35	35	70	55	55	110
Total Trips									
Residential	155	710	865	505	230	735	325	405	730
Office	115	30	145	25	100	125	25	30	55
Retail	25	15	40	100	100	200	220	225	445
Hotel	40	50	90	40	50	90	40	50	90
Total	**335**	**805**	**1140**	**670**	**480**	**1150**	**610**	**710**	**1320**

TABLE 78 PROJECTED SITE GO TRANSIT DEMANDS

Land Use	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Primary Trips									
Residential	175	820	995	590	260	850	370	480	850
Office	165	10	175	15	160	175	5	10	15
Retail	10	0	10	20	20	40	55	55	110
Hotel	45	45	90	45	45	90	45	45	90
Total	**395**	**875**	**1270**	**670**	**485**	**1155**	**475**	**590**	**1065**
Pass-by Trips									
Retail	0	0	0	10	10	20	20	20	40
Total Trips									
Residential	175	820	995	590	260	850	370	480	850
Office	165	10	175	15	160	175	5	10	15
Retail	10	0	10	30	30	60	75	75	150
Hotel	45	45	90	45	45	90	45	45	90
Total	**395**	**875**	**1270**	**680**	**495**	**1175**	**495**	**610**	**1105**

The projected local transit distributions for each of the land uses is outlined in **Table 79** and was derived using the same methodology as was adopted to determine the traffic distribution, as outlined in **Section 9.0**.

Distribution of the GO Transit trips was based on the person trip distributions outlined in **Section 5.0**.

It is noted that pass-by trips have been assumed to already be on the transit network and have not been assigned as new transit trips.

The resultant projected Site transit ridership by route is summarized in **Table 80**.

TABLE 79 SITE LOCAL TRANSIT TRIP DISTRIBUTION

Route	Residential / Hotel	Office	Retail
To/From North via Bus Route 66	20%	15%	25%
To/From North via Bus Route 77	20%	20%	30%
To/From East via Bus Route 80	10%	10%	-
To/From West via Bus Route 80	-	-	10%
To/From East via Streetcar Route 501	45%	55%	-
To/From West via Streetcar Route 501	5%	-	35%
Total	**100%**	**100%**	**100%**

TABLE 80 PROJECTED SITE TRANSIT RIDERSHIP BY TRANSIT ROUTE

Direction	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Lake Shore West GO Line									
EB	10	860	870	20	465	485	30	555	585
WB	385	15	400	650	20	670	445	35	480
Streetcar Route 501									
EB	20	360	380	55	185	240	75	220	295
WB	155	45	200	260	40	300	180	85	265
Bus Route 66									
NB	0	160	160	0	80	80	0	140	140
SB	60	0	60	130	0	130	120	0	120
Bus Route 77									
NB	0	160	160	0	95	95	0	145	145
SB	75	0	75	135	0	135	130	0	130
Bus Route 80									
EB	0	80	80	5	40	45	15	50	65
WB	25	0	25	50	5	55	35	15	50

8.4.4 Existing Population GO Transit Demands

As outlined in **Section 6.0**, in addition to area background development, the proposed GO station is projected to generate demands from greater area residents. A summary of the projected GO trips associated with greater area residential is provided in **Table 81**.

TABLE 81 PROJECTED AREA RESIDENTIAL TRANSIT DEMANDS

Transit	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
GO Transit	370	1595	1965	1160	560	1720	760	990	1750

Distribution of the above trips was based on the person trip distributions outlined in **Section 5.0** and is summarized in **Table 82**.

TABLE 82 PROJECTED AREA RESIDENTIAL TRANSIT RIDERSHIP BY TRANSIT ROUTE

Direction	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Lake Shore West GO Line									
EB	0	1,570	1,570	15	555	570	5	980	985
WB	370	25	395	1,145	5	1,150	755	10	765

8.4.5 Local Transit to/from GO Station

In addition to Site development related transit, there is also expected to be a level of people travelling to and from the station from outside the immediate local area using local transit, as outlined in **Section 7.0**. The projected station related transit trips are summarized in **Table 83**.

TABLE 83 PROJECTED STATION RELATED TRANSIT DEMANDS

Transit	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Local Transit	845	200	1,045	305	610	915	530	405	935

The distribution of these trips is as outlined in **Section 7.0** and is summarized in **Table 80**.

TABLE 84 PROJECTED STATION RELATED TRANSIT RIDERSHIP BY TRANSIT ROUTE

Direction	AM Peak			PM Peak			SAT Peak		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Streetcar Route 501									
EB	240	20	260	90	70	160	155	45	200
WB	100	55	155	30	175	205	55	120	175
Bus Route 66									
NB	0	65	65	0	185	185	0	125	125
SB	255	0	255	95	0	95	170	0	170
Bus Route 77									
NB	0	30	30	0	100	100	0	60	60
SB	140	0	140	45	0	45	80	0	80
Bus Route 80									
EB	110	0	110	45	0	45	70	0	70
WB	0	30	30	0	80	80	0	55	55

8.5 FUTURE CONDITIONS

8.5.1 Availability and Access Considerations

A number of transportation network improvements are proposed which significantly improve transit access for existing and future residents, staff and visitors of the area, including the following key changes:

- Construction of the new GO train station at the Site, which will operate on the Lakeshore West Line. The new station will facilitate quick (approximately 15 minutes) and convenient access to Downtown Toronto. In addition to Downtown Toronto, the new station will facilitate access to the western sections of the Lakeshore West Line (Mississauga, Oakville, Burlington, Hamilton), as well as other stations across the GO network and TTC subway network via Union Station.

- Construction of a transit hub at the Site which is intended to facilitate existing bus and street car routes operating in the Site vicinity, including Streetcar Route 501 and Bus Routes 66, 77 and 80. These routes are intended to be redirected to access the Site as part of their trip.

8.5.2 Operations and Capacity Considerations

An overview of the projected future transit ridership and capacities by service and route is provided on the basis of the aforementioned ridership data (attached in **Appendix B**) and projected background and Site transit trips. As previously discussed, it is noted that recent Saturday data was only available for bus routes 77 and 80. It is also noted that streetcar route was recently reinstated and data was therefore not sourced for this route.

The transit services are discussed in further detail in the following sections. It is noted that no trips were assigned to bus routes 145 and 176 and these routes were therefore not assessed any further.

8.5.3 Lakeshore West GO Line

The new Site transit trips assigned to the Lakeshore West GO line during the weekday peak hours are summarized in **Table 85** and shown in **Figure 74**.

TABLE 85 SITE TRANSIT TRIPS (LAKESHORE WEST GO LINE)

Route Direction	Inbound	Approx. Persons / Train[2]	Outbound	Approx. Persons / Train[2]
Eastbound	10 (20) [30]	3 (10) [15]	860 (465) [555]	287 (233) [278]
Westbound	385 (650) [445]	128 (325) [223]	15 (20) [35]	5 (10) [18]

Notes:
1. AM Peak (PM Peak) [SAT Peak]
2. Based on 3 EB and 3 WB trains during AM, 2 EB and 2 WB trains during PM peak and 2 EB and 2 WB trains during Saturday peak

The existing and future capacity analyses for the Lakeshore West GO train line is provided in **Table 86**. It is noted that as recent Saturday data was not available, analysis was undertaken for the AM and PM peaks only.

The analysis indicates a substantial projected increase in ridership in both directions associated with background development, Site development and station related trips. Ridership is projected to exceed current capacity in the eastbound direction during the AM peak and in the westbound direction during the PM peak.

Notwithstanding this analysis against current day capacity, it is understood that as part of the RER and future GO expansion, additional capacity will be provided along this line which will accommodate substantial additional ridership along the Lakeshore West Line. In this respect, it is expected that future ridership demands can be accommodated through this expansion.

Table 86 Lakeshore West GO Train Line Accumulation Capacity Analysis

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at Mimico Station)												
Eastbound	4,928	2,487	**0.50**	4,928	3,000	**0.61**	3,388	591	**0.17**	3,388	618	**0.18**
Westbound	4,620	352	**0.08**	4,620	361	**0.08**	3,080	2,176	**0.71**	3,080	1,854	**0.60**
Projected New Ridership (see Figure 74)												
Eastbound		160			3,070			365			1,515	
Westbound		1,200			395			2,280			165	
Future Total Conditions (at Future Park Lawn Station)												
Eastbound	4,928	2,647	**0.54**	4,928	6,070	**1.23**	3,388	956	**0.28**	3,388	2,133	**0.63**
Westbound	4,620	1,552	**0.34**	4,620	756	**0.16**	3,080	4,456	**1.45**	3,080	2,019	**0.66**

Notes:
1. Recent Saturday data not available.

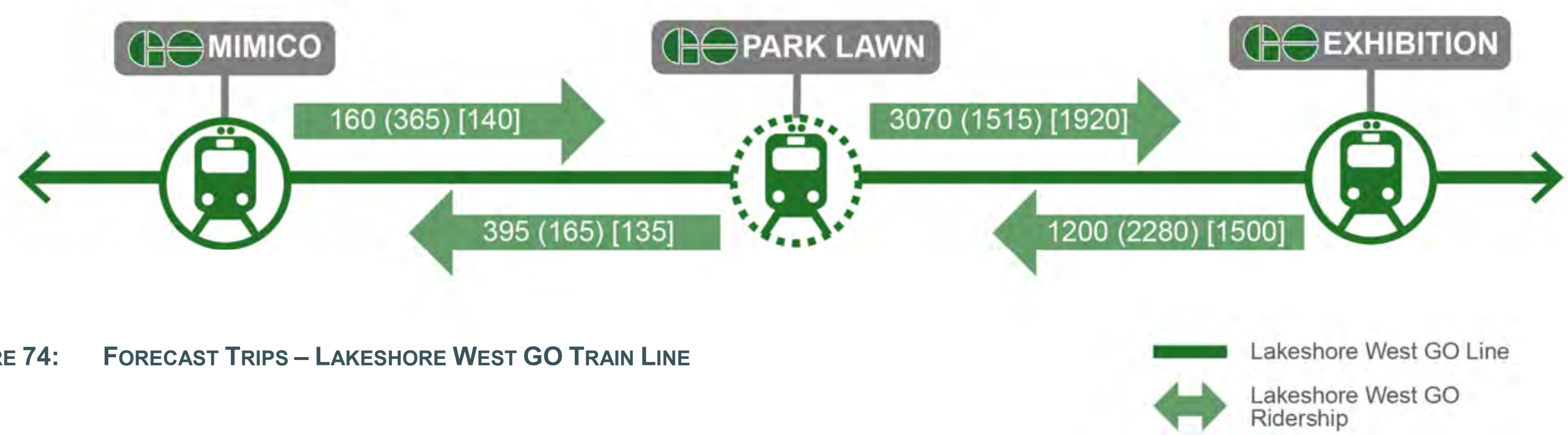


Figure 74: Forecast Trips – Lakeshore West GO Train Line

8.5.4 Streetcar Route 501

The new Site transit trips assigned to streetcar route 501 during the weekday peak hours are summarized in **Table 87** and shown in **Figure 75**.

TABLE 87 SITE TRANSIT TRIPS (STREETCAR ROUTE 501)

Route Direction	Inbound	Approx. Persons / Streetcar[2]	Outbound	Approx. Persons / Streetcar[2]
Eastbound	255 (290) [235]	23 (29) [39]	380 (255) [265]	35 (26) [44]
Westbound	260 (145) [230]	26 (15) [38]	100 (215) [205]	10 (22) [34]

Notes:

1. AM Peak (PM Peak) [SAT Peak]
2. Based on 11 EB and 10 WB streetcars during AM, 10 EB and 10 WB streetcars during PM peak and 6 EB and 6 WB streetcars during Saturday peak

The existing and future capacity analyses for streetcar route 501 is provided in **Table 88**. It is noted that as recent Saturday data was not available, analysis was undertaken for the AM and PM peaks only.

The analysis indicates a substantial projected increase in ridership in both directions associated with background development, Site development and station related trips. Capacity is projected to exceed capacity in the eastbound direction during the AM peak and in the westbound direction during the PM peak.

It is noted that the above analysis is against current day capacity. It is expected however, that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

TABLE 88 STREETCAR ROUTE 501 ACCUMULATION CAPACITY ANALYSIS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at Lake Shore Blvd W / Park Lawn Rd)												
Eastbound	814	267	**0.33**	814	285	**0.35**	740	172	**0.23**	740	151	**0.20**
Westbound	740	105	**0.14**	740	131	**0.18**	740	298	**0.40**	740	294	**0.40**
Projected New Ridership (see Figure xx)												
Eastbound		440			710			295			440	
Westbound		415			240			545			365	
Future Total Conditions (at Future Transit Hub)												
Eastbound	814	707	**0.86**	814	995	**1.22**	740	467	**0.63**	740	591	**0.80**
Westbound	740	520	**0.70**	740	371	**0.50**	740	843	**1.14**	740	659	**0.89**

Notes:
1. Recent Saturday data not available.

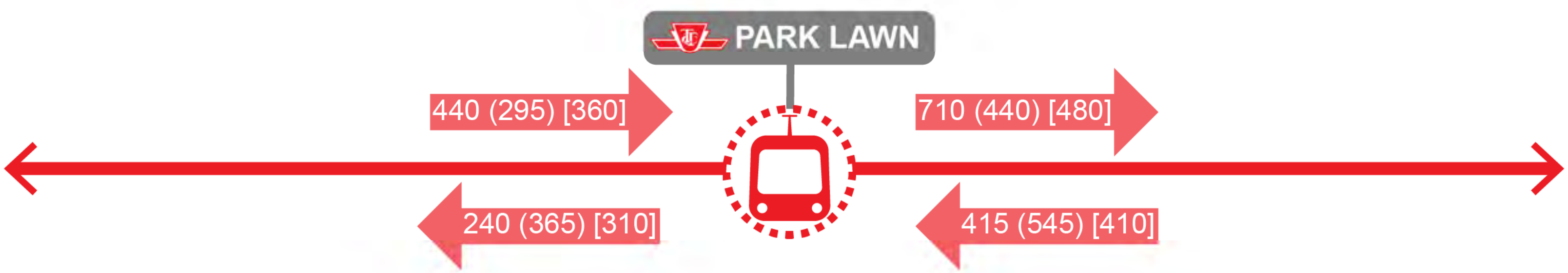


FIGURE 75: FORECAST TRIPS – STREETCAR ROUTE 501

8.5.5 Bus Route 66

The new Site transit trips assigned to bus route 66 line during the weekday peak hours are summarized in **Table 89**.

TABLE 89 SITE TRANSIT TRIPS (BUS ROUTE 66)

Route Direction	Inbound	Approx. Persons / Bus[2]	Outbound	Approx. Persons / Bus[2]
Northbound	-		225 (270) [270]	32 (54) [90]
Southbound	320 (230) [290]	53 (38) [97]	-	

Notes:

1. AM Peak (PM Peak) [SAT Peak]
2. Based on 7 NB and 6 SB buses during AM, 5 NB and 6 SB buses during PM peak and 3 NB and 3 SB buses during Saturday peak

The existing and future capacity analyses for bus route 66 is provided in **Table 90**. It is noted that as recent Saturday data was not available, analysis was undertaken for the AM and PM peaks only.

The analysis indicates a substantial projected increase in ridership to and from the north associated with background development, Site development and station related trips. Capacity is projected to exceed capacity in both directions during both the AM and PM peaks.

It is noted that the above analysis is against current day capacity. It is expected however, that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

Table 90 Bus Route 66 Accumulation Capacity Analysis

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at Lake Shore Blvd W / Park Lawn Rd)												
Northbound	357	82	**0.23**	357	218	**0.61**	255	21	**0.08**	255	67	**0.26**
Southbound	306	42	**0.14**	306	21	**0.07**	306	159	**0.52**	306	70	**0.23**
Projected New Ridership												
Northbound		-			425			-			390	
Southbound		430			-			385			-	
Future Total Conditions (at Future Transit Hub)												
Northbound	357	82	**0.23**	357	643	**1.80**	255	21	**0.08**	255	457	**1.79**
Southbound	306	472	**1.54**	306	21	**0.07**	306	544	**1.78**	306	70	**0.23**

Notes:
1. Recent Saturday data not available.

8.5.6 Bus Route 77

The new Site transit trips assigned to bus route 77 line during the weekday peak hours are summarized in **Table 91**.

TABLE 91 SITE TRANSIT TRIPS (BUS ROUTE 77)

Route Direction	Inbound	Approx. Persons / Bus[2]	Outbound	Approx. Persons / Bus[2]
Northbound	-		195 (200) [220]	28 (29) [73]
Southbound	225 (195) [225]	32 (28) [75]	-	

Notes:
1. AM Peak (PM Peak) [SAT Peak]
2. Based on 7 NB and 7 SB buses during AM, 7 NB and 7 SB buses during PM peak and 3 NB and 3 SB buses during Saturday peak

The existing and future capacity analyses for bus route 77 is provided in **Table 92**.

The analysis indicates a substantial projected increase in ridership to and from the north associated with background development, Site development and station related trips. Capacity is projected to exceed capacity in both directions during both the AM and Saturday peaks.

It is noted that the above analysis is against current day capacity. It is expected however, that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

Table 92 Bus Route 77 Accumulation Capacity Analysis

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at Windermere Ave / Windermere Pl)												
Northbound	357	129	**0.36**	357	207	**0.58**	357	19	**0.05**	357	43	**0.12**
Southbound	357	130	**0.36**	357	129	**0.36**	357	27	**0.08**	357	26	**0.07**
Projected New Ridership												
Northbound		-			260			-			215	
Southbound		235			-			230			-	
Future Total Conditions (at Future Transit Hub)												
Northbound	357	129	**0.36**	357	467	**1.31**	357	19	**0.05**	357	258	**0.72**
Southbound	357	365	**1.02**	357	129	**0.36**	357	257	**0.72**	357	26	**0.07**

	Saturday Peak					
Existing Conditions (at Windermere Ave / Windermere Pl)						
Northbound	153	40	**0.26**	153	57	**0.37**
Southbound	153	46	**0.30**	153	46	**0.30**
Projected New Ridership						
Northbound						
Southbound						
Future Total Conditions (at Future Transit Hub)						
Northbound	153	40	**0.26**	153	302	**1.97**
Southbound	153	291	**1.90**	153	46	**0.30**

8.5.7 Bus Route 80

The new Site transit trips assigned to bus route 80 during the weekday peak hours are summarized in **Table 93**.

TABLE 93 SITE TRANSIT TRIPS (BUS ROUTE 80)

Route Direction	Inbound	Approx. Persons / Bus[2]	Outbound	Approx. Persons / Bus[2]
Eastbound	255 (290) [235]	85 (97) [78]	380 (255) [265]	127 (85) [88]
Westbound	260 (145) [230]	87 (48) [77]	100 (215) [205]	33 (72) [68]

Notes:
1. AM Peak (PM Peak) [SAT Peak]
2. Based on 3 EB and 3 WB buses during AM, 3 EB and 3 WB buses during PM peak and 3 EB and 3 WB buses during Saturday peak

The existing and future capacity analyses for bus route 80 is provided in **Table 94**.

The analysis indicates a substantial projected increase in ridership in both directions associated with background development, Site development and station related trips. Capacity is projected to exceed capacity in the eastbound direction during the AM peak.

It is noted that the above analysis is against current day capacity. It is expected however, that with the development of the Site and the proposed station, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

TABLE 94 BUS ROUTE 80 ACCUMULATION CAPACITY ANALYSIS

Direction	AM Peak						PM Peak					
	On Arrival			On Departure			On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at The Queensway / Park Lawn Rd)												
Eastbound	153	43	**0.28**	153	42	**0.27**	153	56	**0.37**	153	50	**0.33**
Westbound	153	79	**0.52**	153	84	**0.55**	153	41	**0.27**	153	48	**0.31**
Projected New Ridership												
Eastbound		110			115			50			50	
Westbound		30			30			75			85	
Future Total Conditions (at Future Transit Hub)												
Eastbound	153	153	**1.00**	153	157	**1.03**	153	106	**0.69**	153	100	**0.65**
Westbound	153	109	**0.71**	153	114	**0.75**	153	116	**0.76**	153	133	**0.87**

Direction	Saturday Peak					
	On Arrival			On Departure		
	Existing Hourly Capacity	Hourly Ridership	V/C	Existing Hourly Capacity	Hourly Ridership	V/C
Existing Conditions (at The Queensway / Park Lawn Rd)						
Eastbound	153	54	**0.35**	153	41	**0.27**
Westbound	153	58	**0.38**	153	68	**0.44**
Projected New Ridership						
Eastbound		85			75	
Westbound		55			70	
Future Total Conditions (at Future Transit Hub)						
Eastbound	153	139	**0.91**	153	116	**0.75**
Westbound	153	113	**0.74**	153	138	**0.90**

8.6 TRANSIT ASSESSMENT SUMMARY

BA Group has undertaken a general review of the transit infrastructure located within the vicinity of the Site. Existing and projected transit passenger volumes were accounted for in the assessment.

8.6.1 Review Criteria

The review considered the following assessment criteria:

Availability:

- Higher order transit service is highly available to the Site, with stations located in close proximity; and
- Transit options facilitate City-wide transit accessibility with minimal or no transfer required between routes.

Access:

- Adjacent or nearby transit stops offer convenient and accessible entrance and exit, and do not encourage jaywalking activity; and
- Multiple access points are preferable.

Capacity:

- There is capacity for the existing transit services to accommodate an increase in transit usage; and
- Where capacity is limited, plans are in place to alleviate capacity concerns via service expansion and/or the construction of new higher order transit route(s).

Operations:

- Bus stops have transit shelters;
- Surface transit routes are well integrated with general traffic network; and
- Preferably, the Site is functionally integrated with adjacent higher order transit station, facilitating seamless access to stations.

8.6.2 Evaluation Results

The Site currently has access to a number of streetcar and bus services, with proposed Site improvements to substantially improve transit operations and accessibility in the area via the construction of a GO station and transit hub.

An assessment of the transit network was conducted based upon the criteria established in the previous section. A summary of the key findings of the transit assessment is provided below.

Availability:

- A number of streetcar and bus routes currently operate in the vicinity of the Site.
- With the construction of the proposed transit hub, numerous streetcar and bus services will be available on the doorstep of the development.
- GO Train service is currently available via Mimico Station, located an approximate 2 kilometre walk to the west of the Site.
- With the construction of the proposed station, GO services will be readily accessible for residents, staff and visitors of the Site, providing higher order transit connections towards Downtown Toronto, Mississauga and the balance of the GO network and TTC subway network via Union Station.

Access:

- Existing bus and streetcar stops are located along Park Lawn Road and Lake Shore Boulevard West, with signalized intersections in the area providing crossing locations for pedestrians.
- The construction of the transit hub will facilitate excellent access to transit services from within the Site.
- Appropriate crossing points are proposed within the Site to facilitate access to and from the proposed transit hub.

Capacity:

- Transit services within the Site vicinity currently operate within capacity.
- As a result of projected Site development, background development and station related transit activity, a number of area transit services are projected to exceed current day capacity.
- It is expected however, that with the development of the Site and the proposed station along with RER and future GO expansion, transit routes and scheduling would substantially change from existing, with a view to accommodating potential future ridership in the area. In this respect, it is expected that future ridership demands can be accommodated through the provision of increased service.

Operations:

- Existing bus and streetcar stops in the Site vicinity are generally accompanied by a shelter
- Existing bus and streetcar services currently generally operate in mixed traffic conditions.
- The construction of the proposed transit hub will facilitate integration of transit services in the Site area, including train, streetcar and bus services.
- The streetcar is generally proposed to operate within a separate carriageway to traffic under future conditions.

9.0 VEHICLE TRAVEL ASSESSMENT

9.1 APPROACH

The follow sections include:

- Traffic Network
    - A review of the existing street network;
    - A review of the future street network changes;

- Traffic Volumes
    - A review of traffic volumes on the existing traffic network today;
    - A projection of future traffic volumes as a result of area development and growth on the existing street network, traffic condition without development of the Site as planned;
    - A review of traffic volume changes that result from the transportation infrastructure to be delivered as part of the development proposal;
    - A review of Site development related traffic volumes;

- Traffic Operations
    - An overview of Existing traffic conditions;
    - An overview of Future Background traffic conditions;
    - An overview of Future Total traffic conditions; and
    - Detailed review of key intersection operations.

Analysis has been completed for the following scenarios during the weekday AM and PM peak hours, and weekend (Saturday) peak hour:

- Existing Traffic Conditions
- Future Background Traffic Conditions (2029 horizon year)
- Future Total Traffic Conditions (2029 horizon year)

9.2 TRAFFIC NETWORK

9.2.1 Existing Network

The existing Site is generally bound by the Gardiner Expressway and Lakeshore West rail line to the north, Lake Shore Boulevard West to the south, Gardiner Expressway on and off ramps to the east and Park Lawn Road to the west.

In the vicinity of the Site, The Queensway to the north and Lake Shore Boulevard West to the south serve as major east-west roads. The Gardiner Expressway serves as a major east-west regional highway.

Park Lawn Road serves as the north-south connector road in the area.

The existing road network is summarized in **Table 95** and illustrated in **Figure 76**.

Existing intersections included within the analysis are listed in **Table 96**, along with the existing and future total traffic control for each intersection.

TABLE 95 EXISTING AREA ROAD NETWORK

Type		Street Name	Parking & Regulations	Roadway Limits	Description
City Expressway	East-West	F. G. Gardiner Expressway (the Gardiner Expressway)	No parking or stopping is permitted at any time.	Primary high capacity vehicular access route serving the Toronto Central Area from along the Lake Ontario waterfront and particularly to / from the western portion of the City.	Controlled access expressway that is The Gardiner Expressway passes to the immediate north of the Site. The nearest interchanges and on/off ramps with the Gardiner Expressway that would provide access to/from the expressway for any Site related traffic are at Lake Shore Boulevard at Brookers Lane (eastbound on ramp and westbound off ramp) and at Park Lawn Road (eastbound off ramp and westbound on ramp).
Major Arterial	East-West	The Queensway	No parking or stopping is permitted at any time.	Runs from Etobicoke to the Queen Street West / King Street West / Roncesvalles Avenue intersection in Parkdale on the western side of central Toronto	East-west major arterial roadway. East of the 2150 Lake Shore Site, a dedicated TTC streetcar facility runs along the centre of The Queensway and terminates at the Humber Loop.
Major Arterial	North-South	Park Lawn Road	No parking or stopping is permitted at any time.	Extends north from Lake Shore Boulevard West to the residential neighbourhood north of The Queensway. Provides connections to the Gardiner Expressway.	Park Lawn Road from Lake Shore Boulevard to The Queensway is a major arterial roadway with a basic four lane cross-section, and North of The Queensway, Park Lawn Road is a collector road that enables access northwards into Etobicoke.
Major Arterial	East-West	Lake Shore Boulevard West	No parking or stopping is permitted at any time.	Forms a major route providing access across the City of Toronto, as far west as Oakville and as far east as the Beaches neighbourhood.	Located to the immediate south of the Site. Has a basic four lane cross-section in the Site vicinity with two lanes in each direction, plus turn lanes at intersections. Toronto Transit Commission (TTC) streetcar tracks are located within the centre two lanes.
Collector	North-South	Brookers Lane	On-street paid parking permitted along both the north and south side of Brookers Lane.	Connects to and from the Gardiner Expressway via the intersection of Lake Shore Boulevard and Brookers Lane	It serves as a small collector feeding traffic from the Humber Bay Shores development onto Lake Shore Boulevard West, and the Gardiner Expressway.
Collector	East-West	Marine Parade Drive	On-street paid parking permitted along south side of Marine Parade Drive, east of Humber Bay Park Road East.	The road loops from the southern termination of Park Lawn Road to Lake Shore Boulevard West.	The southern boundary of the Humber Bay Shores Secondary Plan area. Marine Parade Drive has a four lane cross-section with two lanes in each direction, separated by a central median.

TABLE 96 EXISTING INTERSECTIONS WITHIN STUDY AREA

<table>
<tr><th>Intersection</th><th>Existing Traffic Control[1]</th><th>Future Total Traffic Control[1]</th></tr>
<tr><td>Park Lawn Rd / The Queensway</td><td colspan="2" rowspan="9">Signalized</td></tr>
<tr><td>Park Lawn Rd / Gardiner WB On Ramp / Ontario Food Terminal Dwy</td></tr>
<tr><td>Park Lawn Rd / Metro Grocery Dwy / Existing Site Dwy South
Park Lawn Rd / Metro Grocery Dwy / Street B under Future Total</td></tr>
<tr><td>Lake Shore Blvd W / Park Lawn Rd / Marine Parade Dr</td></tr>
<tr><td>Lake Shore Blvd W / Legion Rd / Marina Del Rey Condos Dwy</td></tr>
<tr><td>Lake Shore Blvd W / Brookers Ln / Gardiner EB On Ramp / Gardiner WB Off Ramp
Lake Shore Blvd W / Brookers Ln / Site Dwy 3 under Future Total</td></tr>
<tr><td>Lake Shore Blvd W / Newport Beach Condos Dwy / TTC Humber Loop</td></tr>
<tr><td>Lake Shore Blvd W / Palace Pier Crt</td></tr>
<tr><td>Lake Shore Blvd W / Windermere Ave / Sir Casimir Gzowski Park Dwy</td></tr>
<tr><td>Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd
Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd / Relief Rd under Future Total</td><td>Signalized
• 3-way</td><td>Signalized
• 4-way</td></tr>
<tr><td>Lake Shore Blvd W / Humber Bay Park Rd W</td><td colspan="2" rowspan="3">Unsignalized</td></tr>
<tr><td>Marine Parade Dr / Humber Bay Park Rd E</td></tr>
<tr><td>Lake Shore Blvd W / Marine Parade Dr</td></tr>
<tr><td>Park Lawn Rd / South Beach Condos Dwy / Existing Site Dwy North
Park Lawn Rd / South Beach Condos Dwy / Site Dwy 2 under Future Total</td><td>Unsignalized</td><td>Signalized</td></tr>
<tr><td>Lake Shore Blvd W / Shore Breeze Dr
Lake Shore Blvd W / Shore Breeze Dr / Loop Rd under Future Total</td><td rowspan="3">Unsignalized
• 3-way</td><td>Signalized
• 4-way
• Movements at Loop Rd restricted to inbound only
• No Left Turns into Shore Breeze Drive</td></tr>
<tr><td>Lake Shore Blvd W / Silver Moon Dr
Lake Shore Blvd W / Silver Moon Dr / Loop Rd under Future Total</td><td>Signalized
• 4-way
• Movements at Loop Rd restricted to outbound only</td></tr>
<tr><td>Lake Shore Blvd W / The Marginal Blvd
Lake Shore Blvd W / The Marginal Blvd / Relief Rd under Future Total</td><td>Signalized
• 4-way
• No Left Turns into The Marginal Blvd</td></tr>
</table>

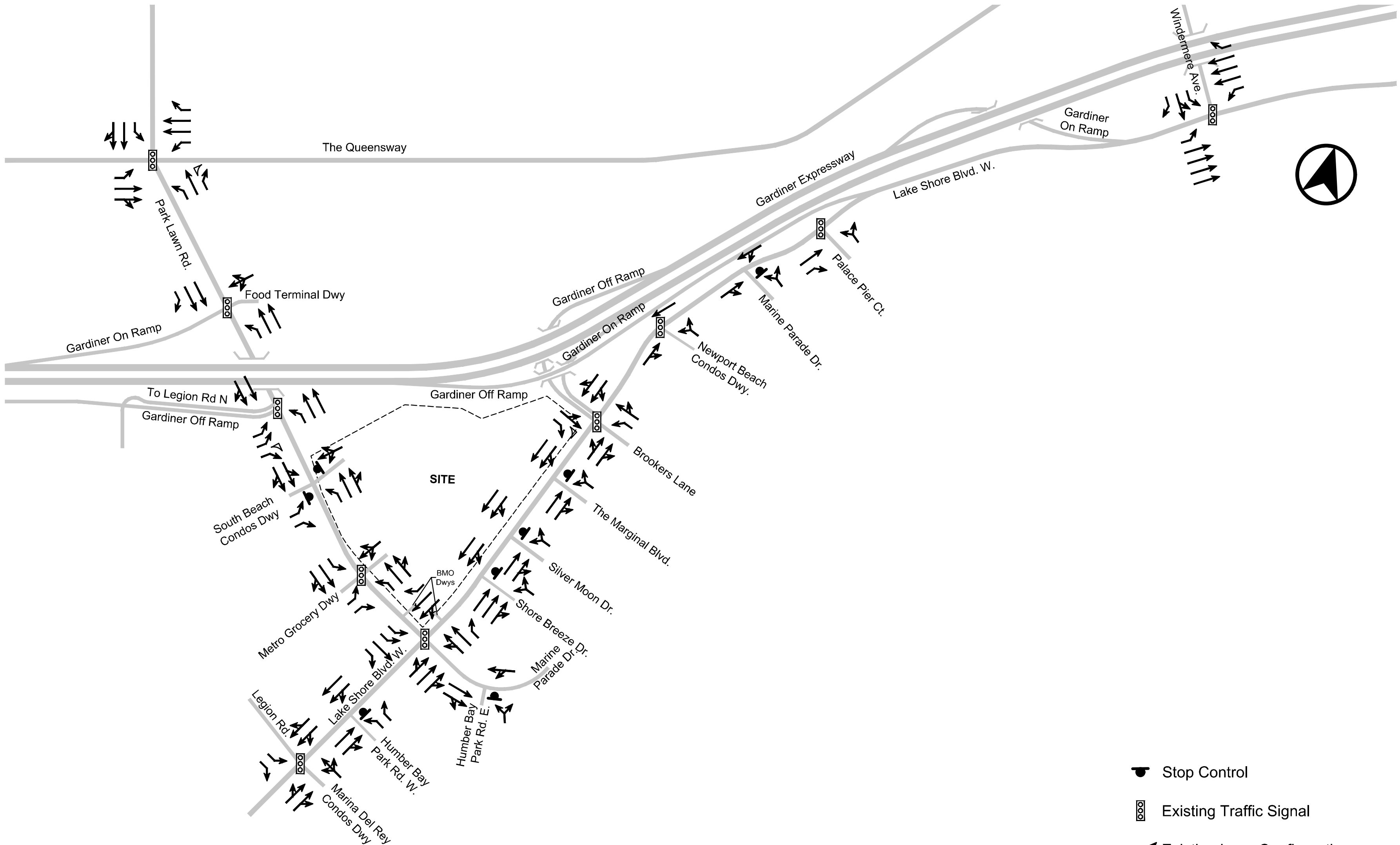


FIGURE 76 EXISTING ROAD NETWORK

9.2.2 Future Background Network

The Future Background analysis was based largely on the existing road network configuration, with some minor alterations as outlined in the Traffic Impact Study prepared by MMM Group and AECOM for the Humber Bay Shores development. The assumed alterations include:

- Lane configuration changes at the Park Lawn Road / Gardiner Eastbound Off Ramp / Legion Road and the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersections
- Signalization of the Lake Shore Boulevard West / Silver Moon Drive intersection
- Turn restrictions of right in/right out at the Lake Shore Boulevard West / Shore Breeze Drive and Lake Shore Boulevard West / The Marginal Boulevard intersections.

The assumed road network configuration is shown in **Figure 77**.

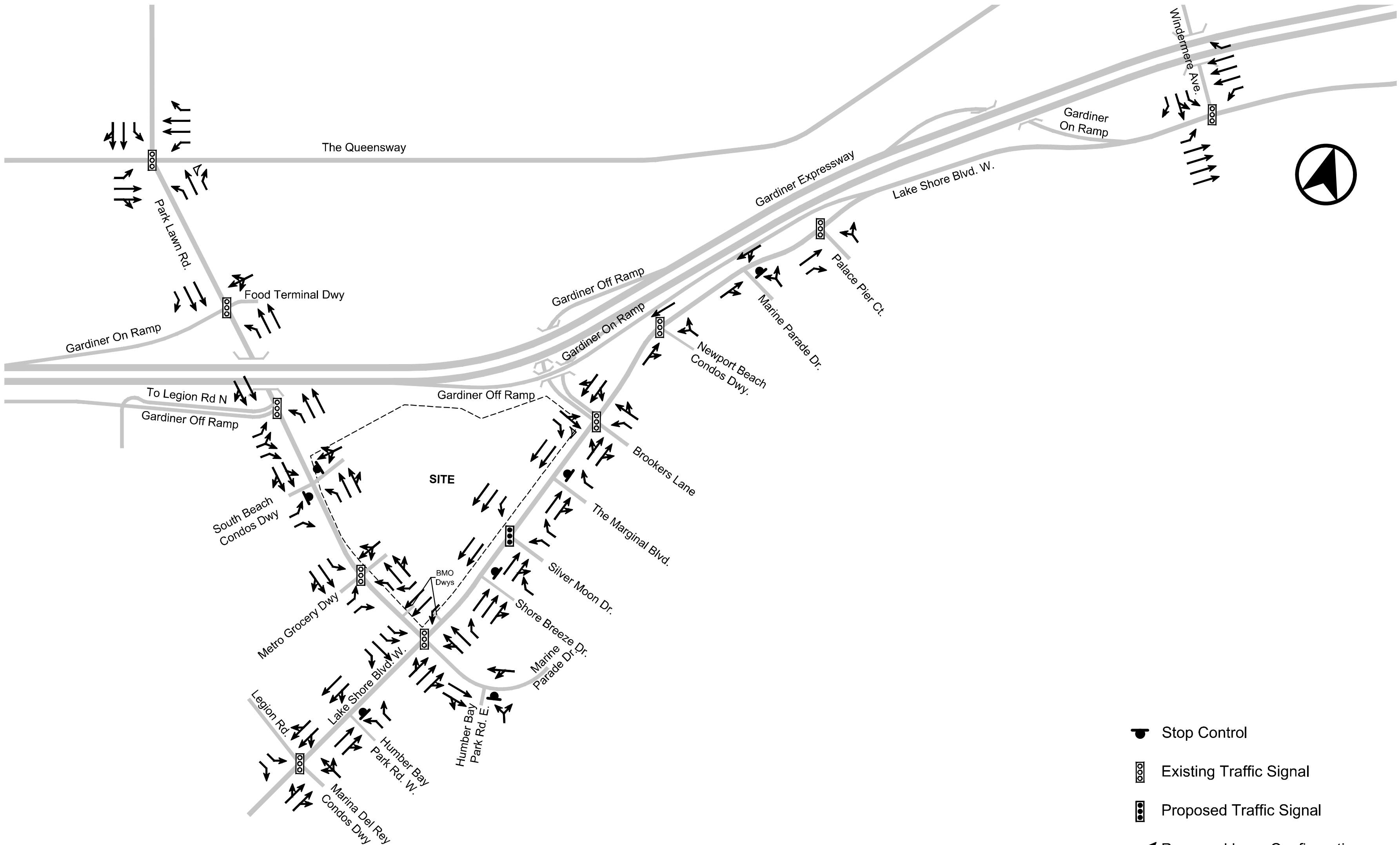


FIGURE 77 FUTURE BACKGROUND ROAD NETWORK

9.2.3 Future Total Network

The following key changes to the area road network are proposed as part of the development of the Site:

- Construction of the Relief Road, a four-lane road which will extend across the north end of the Site from Park Lawn Road at the Gardiner Expressway eastbound off ramp to Lake Shore Boulevard West at The Marginal Boulevard.

- Realignment of the Gardiner Expressway ramps which currently terminate on Lake Shore Boulevard West at Brookers Lane to terminate on the Relief Road. The construction of the Relief Road and the realignment of the Gardiner Expressway ramps are considered to be key pieces of infrastructure which will alleviate pressure along the Park Lawn Road and Lake Shore Boulevard West corridors along the Site boundaries.

- Construction of an internal road network (in addition to the Relief Road) which will service the proposed land uses on the Site, including two connections to Park Lawn Road, two connections to Lake Shore Boulevard West and one connection to the Relief Road. The internal road network includes the Loop Road to and from Lake Shore Boulevard West, which generally operates one-way for cars and will provide direct bicycle and streetcar access into the Site.

- Reconfiguration of Lake Shore Boulevard West to provide bicycle lanes and move the streetcar tracks to a central carriageway which for the most part, is separated from the traffic lanes along the Site boundary.

- A total of six driveways providing access to the underground garage, including two to Park Lawn Road, one to Lake Shore Boulevard West, two to the Relief Road and one to the internal road network.

Specific changes to lane configurations as proposed at various intersections are outlined individually within the analysis sections for these intersections.

New intersections to be constructed under future total conditions within the study area are listed **Table 97** along with the future total traffic control for each intersection.

The future road network is illustrated in **Figure 78**.

TABLE 97 NEW INTERSECTIONS WITHIN STUDY AREA UNDER FUTURE TOTAL CONDITIONS

Intersection	Future Total Traffic Control[1]
Relief Rd / Site Dwy 1	**Signalized**
Relief Rd / Gardiner EB On Ramp / Gardiner WB Off Ramp	
Park Lawn Rd / Street A	**Unsignalized** • *Site Dwys and Streets A and C Right In/Right Out*
Park Lawn Rd / Site Dwy 4	
Relief Rd / Site Dwy 5	
Relief Rd / Street C	
Loop Rd / Street C	**Unsignalized** • *Loop Rd one-way SB south of intersection*
Loop Rd / Street A	**Unsignalized** • *Loop Rd one-way NB south of intersection*
Loop Rd / Street B	**Unsignalized** • *Loop Rd one-way NB north and south of intersection*
Street C / Site Dwy 6	**Unsignalized**

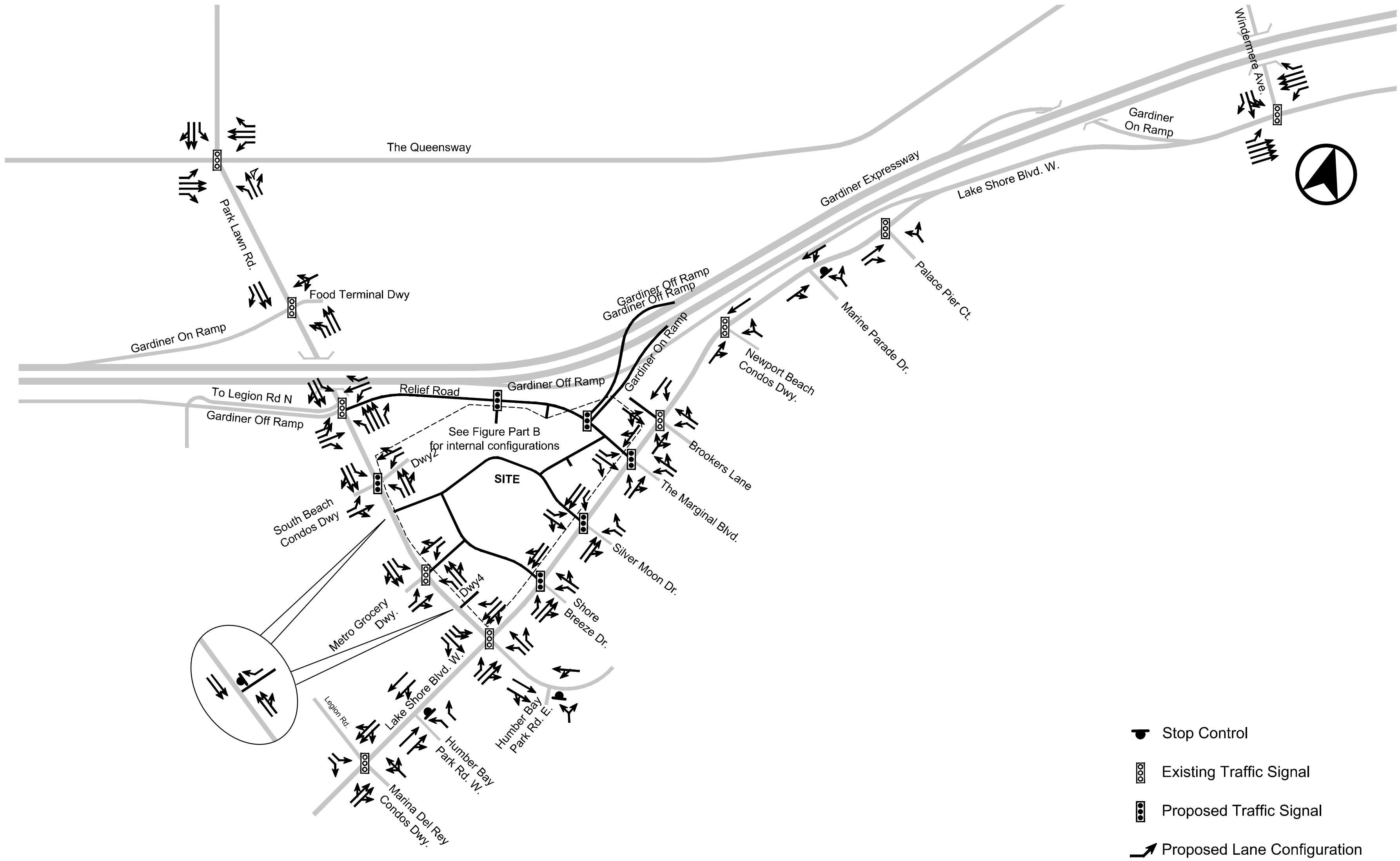


FIGURE 78A FUTURE ROAD NETWORK - EXTERNAL

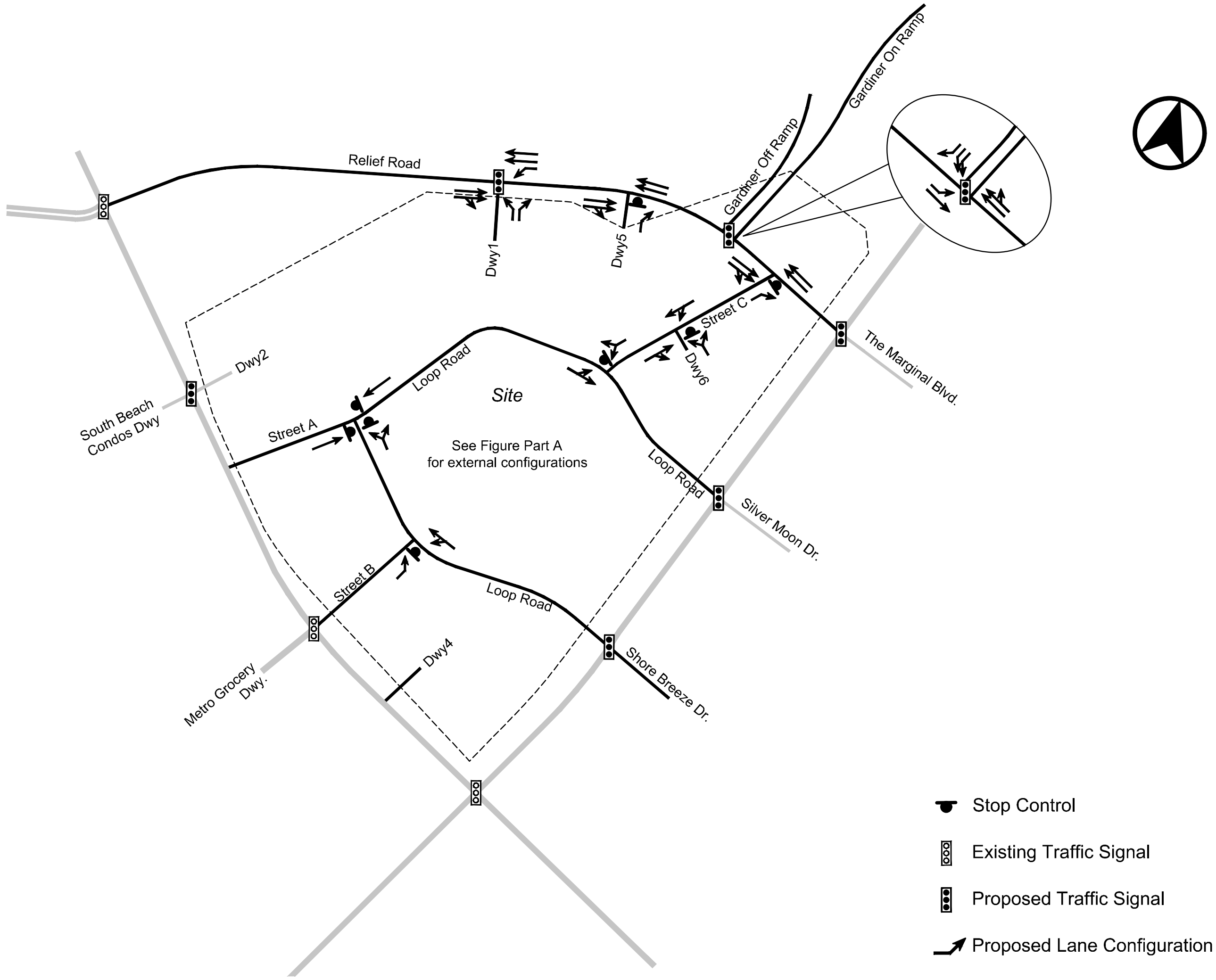


FIGURE 78B FUTURE ROAD NETWORK - INTERNAL

9.3 TRAFFIC VOLUMES

9.3.1 Existing Traffic Volumes

Existing vehicular, cycling, and pedestrian traffic at area intersections is established based on traffic count information collected on behalf of BA Group as summarized in **Table 98**. Traffic count data sheets reviewed as part of this study are provided in **Appendix C**.

Traffic data at area intersections have been counted on multiple occasions to ensure existing baseline traffic conditions are representative.

To determine whether the data is generally in line with typical volumes within the area, the collected traffic volume set (2019) was compared against additional counts previously undertaken between 2011-2018. On the basis of this review, adjustments were made to the collected traffic volume set such that it was considered to adequately represent typical volumes within the area.

The volume adjustments are provided in **Appendix D**.

The resultant existing peak hour traffic volumes are illustrated in **Figure 79**.

TABLE 98 TRAFFIC DATA COLLECTION SUMMARY

Intersection	Source	Date and Time
Park Lawn Rd / The Queensway	Accu-Traffic Inc.	Thursday June 6, 2019 7:30am-9:30am 4:00pm-6:00pm Saturday June 8, 2019 12:00pm-3:00pm
Park Lawn Rd / Gardiner WB On Ramp / Ontario Food Terminal Dwy		
Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd		
Park Lawn Rd / South Beach Condos Dwy / Site Dwy		
Park Lawn Rd / Metro Grocery Dwy / Site Dwy		
Park Lawn Rd / Site BMO Dwy		
Lake Shore Blvd W / Park Lawn Rd / Marine Parade Dr		
Marine Parade Dr / Humber Bay Park Rd E		
Lake Shore Blvd W / Legion Rd / Marina Del Rey Condos Dwy		
Lake Shore Blvd W / Humber Bay Park Rd W		
Lake Shore Blvd W / Site BMO Dwy		
Lake Shore Blvd W / Shore Breeze Dr		
Lake Shore Blvd W / Silver Moon Dr		
Lake Shore Blvd W / The Marginal Blvd		
Lake Shore Blvd W / Brookers Ln / Gardiner EB On Ramp / Gardiner WB Off Ramp		
Lake Shore Blvd W / Newport Beach Condos Dwy / Humber Loop		
Lake Shore Blvd W / Marine Parade Dr		
Lake Shore Blvd W / Palace Pier Crt		
Lake Shore Blvd W / Windermere Ave / Sir Casimir Gzowski Park Dwy		

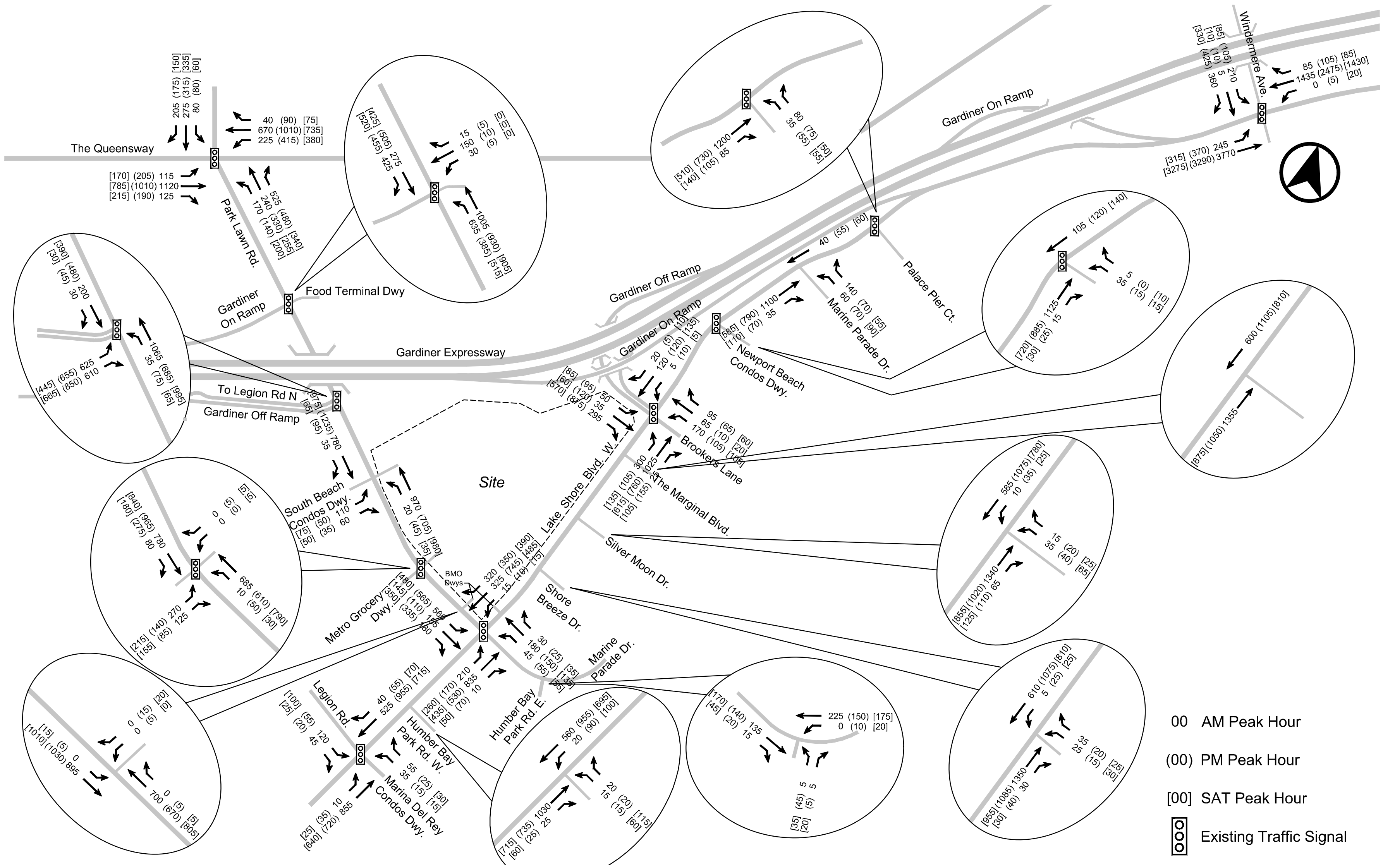


FIGURE 79 EXISTING TRAFFIC VOLUMES

9.3.2 Future Background Traffic Volumes

A comprehensive series of traffic allowances have been made within the analysis to account for traffic generated by new area developments that are anticipated to be completed prior to, or around the same time as, the proposed development. The proposed background developments were outlined in **Section 6.0** and are reproduced in **Table 30**.

For the purpose of the Future Background scenario, background developments were assigned by BA Group on the basis that the Site is not developed. In this respect, the future background scenario does not include allowance for:

- Interactions associated with the mixed use nature of the Site;
- Projected mode split shifts associated with the construction of the transit station; or
- Diversions available along road infrastructure proposed to be constructed as part of the Site development.

Background Diversions

It is noted that diversions due to the Legion Road extension were considered, as this improvement is not specifically associated with the proposed development. Additionally, diversions were made to account for assumed future turn restrictions. Diversions to existing traffic assumed under Future Background are shown in **Figure 80**.

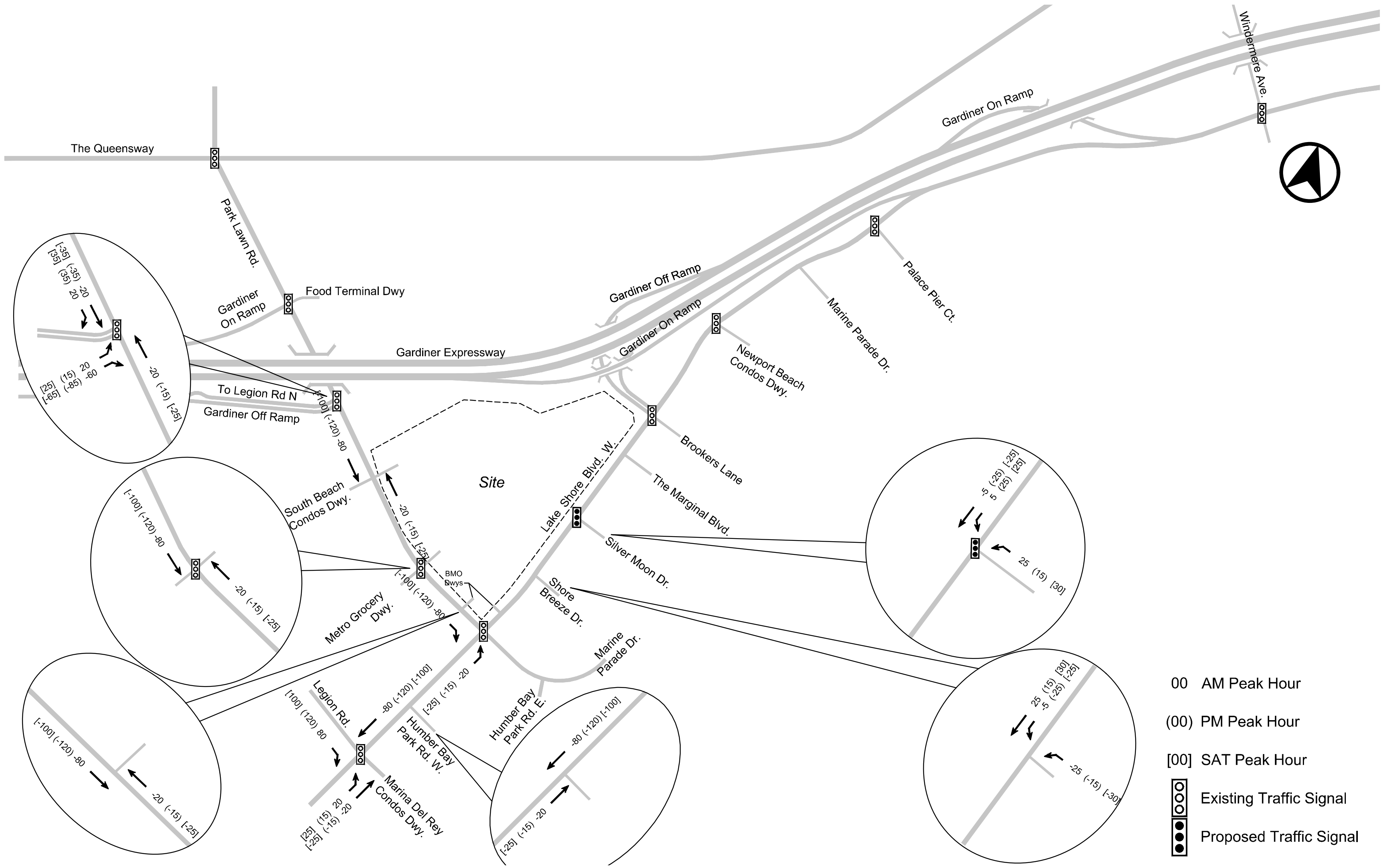


FIGURE 80 FUTURE BACKGROUND AREA NETWORK CHANGES (DIVERSION)

Background Developments

The resultant background development traffic volumes (without development of the Site) are illustrated in **Figure 81**. A separate assignment was undertaken by BA Group for background traffic on the basis that the Site is developed. This is discussed separately in the following section.

Table 99 Area Background Developments

Development	Statistics
42 Park Lawn Road	321 Residential Units
2313 Lake Shore Blvd	241 Residential Units
Humber Bay Shores[1]	5,272 Residential Units 23,517 m^2 Commercial / Retail
Mimico 20/20	2,574 Residential Units 9,125 m^2 Retail
Mimico-Judson	1,686 Residential Units 70,130 m^2 Office
251 Manitoba St	498 Residential Units
Total	**10,600 Residential Units** **103,000 m^2 Non-Residential**

Notes:
1. Development is partially constructed and occupied at the time of writing this report. Appropriate adjustments to the assignment were made to reflect this.

Corridor Growth

No specific allowance has been made for general (non-development) corridor growth, assuming that the majority of traffic growth in the area will be associated with the proposed developments in the area, and is already allowed for in the calculation of background development traffic.

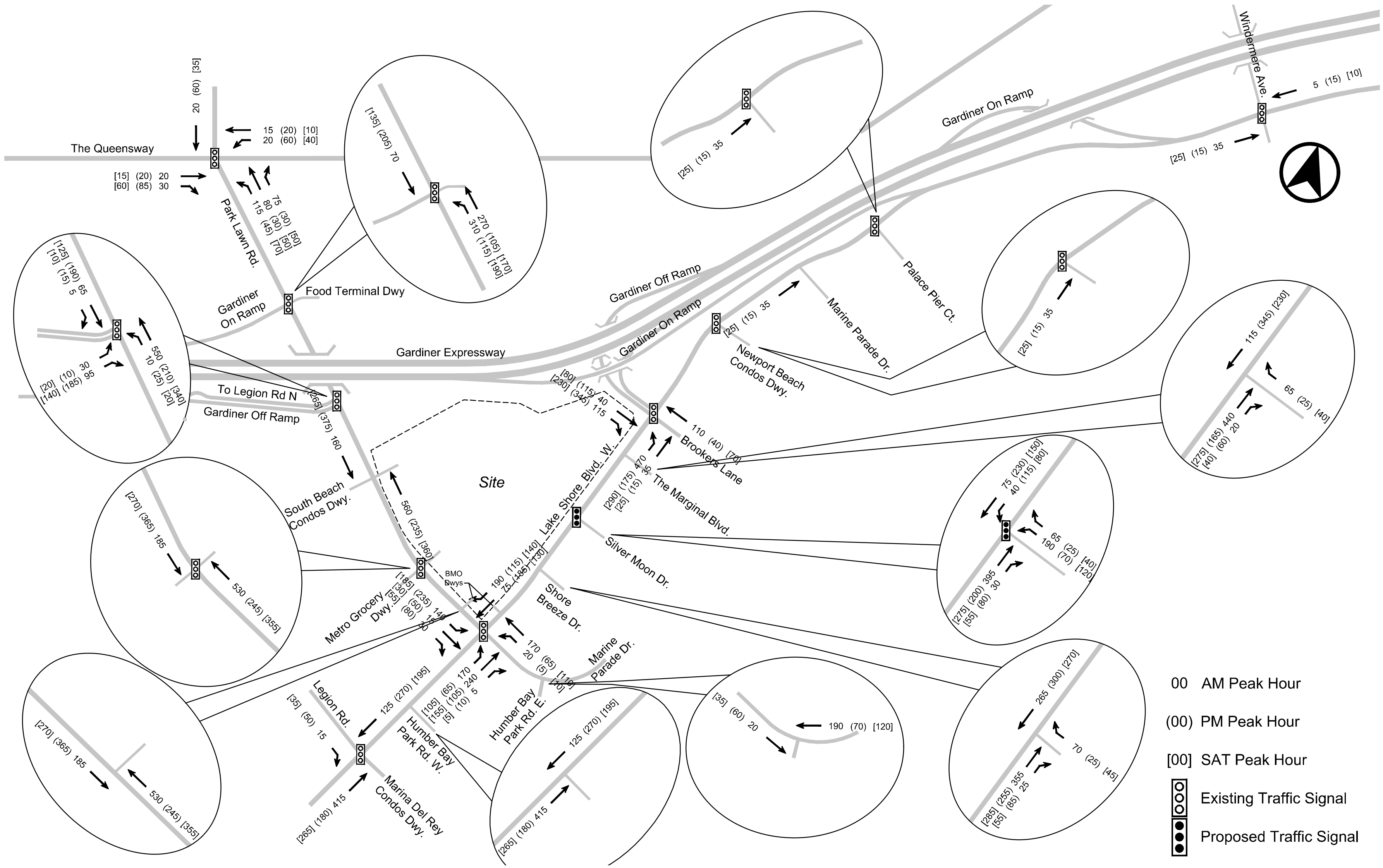


FIGURE 81 BACKGROUND TRAFFIC VOLUMES WITHOUT DEVELOPMENT OF SITE

Total Background Traffic Volumes

Future Background traffic volumes have been established for the weekday and Saturday peak hours as the sum of Existing traffic volumes and specific area development traffic allowances. The Future Background traffic volumes are illustrated in **Figure 82**.

It should be noted that given the extensive changes associated with the proposed development of the Site, including the introduction of the transit station and substantial road network changes, Future Background represents a significantly different scenario to that of Future Total. In this respect, the Future Background scenario has been prepared primarily for comparison purposes to assess the impact of the infrastructure proposed to be constructed with the development of the Site.

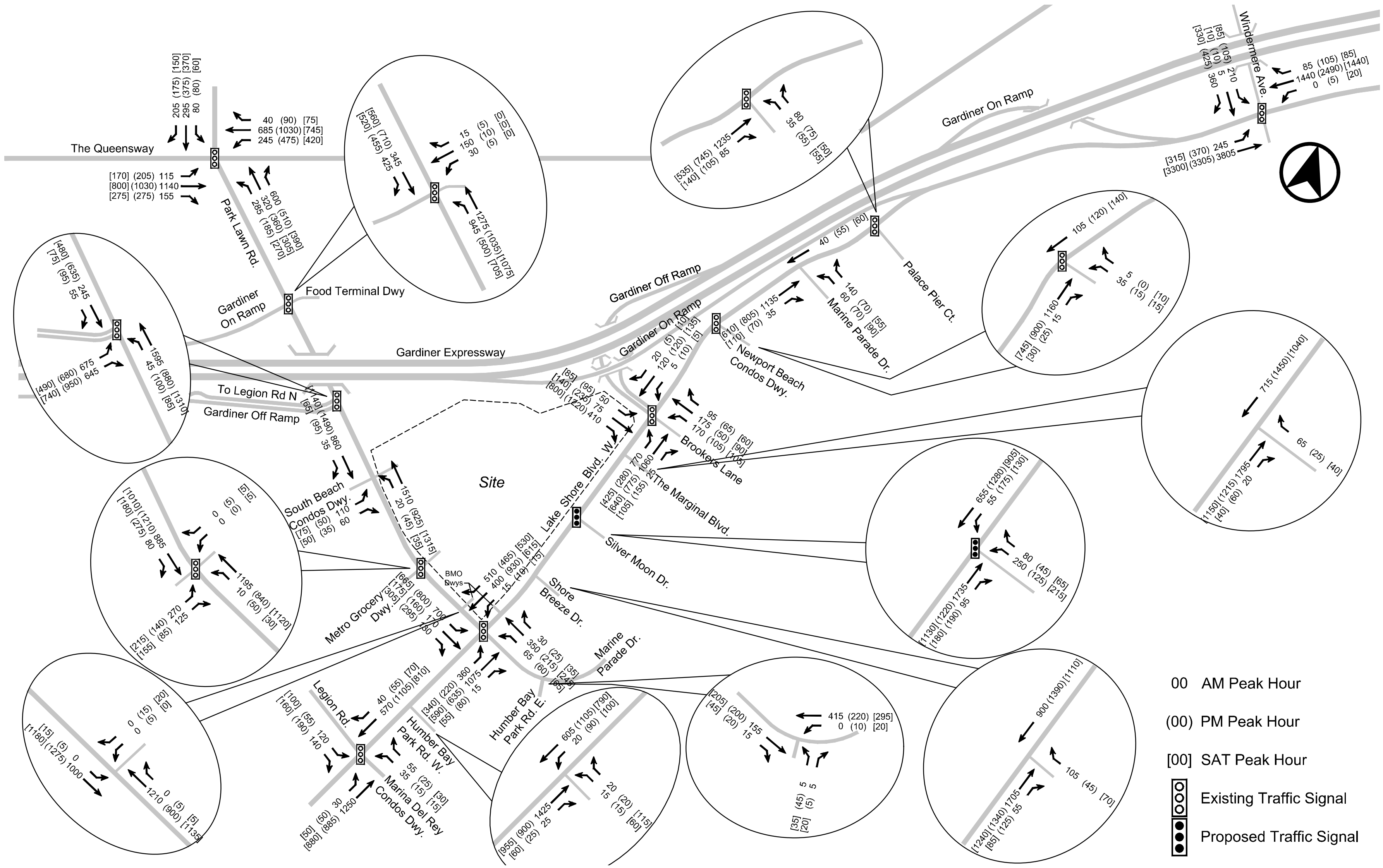


FIGURE 82 FUTURE BACKGROUND TRAFFIC VOLUMES

9.3.3 Future Total Traffic Volumes

Given the scale of transportation infrastructure to be delivered as part of the proposed Master Plan, future traffic changes on the area street network need to be considered given the travel behaviour impacts it will have. This section includes:

- Area Traffic Changes due to mode shifts expected as a result of the construction of the transit station.
- Area traffic Changes due to new street infrastructure
- Background Development related traffic
- Site Development related traffic
- Site Transit Station Traffic

9.3.3.1 Area Traffic Changes due to New Station (removal)

The following reviews the area traffic impact of the implementation of the new major transit infrastructure that is proposed to be delivered as part of the development.

As outlined in **Section 5.0**, the proposed transit station is expected to have a substantial impact on travel behaviours in the area, with an increased shift towards transit-based trips from automobile-based trips. This change in travel behaviour is expected not only for future development, but also for surrounding existing development that is located within the proposed stations potential catchment.

Based on the foregoing, a reduction to existing volumes through the Site area is expected.

The key catchment areas which were assessed with respect to the above include the Site area, primary area, secondary area, tertiary area and peripheral area, as outlined in **Section 6.0**.

Reductions to existing volumes were estimated for the catchment area populations by comparing projected vehicle trip numbers based on existing mode splits and distributions to projected vehicle trip numbers based on adopted future mode splits and distributions for each of these areas.

On the basis of the above, vehicle trips associated with existing development in the Site area were projected to reduce by in the order of 55%, as outlined in **Section 6.1.6**. As such, a reduction of 55% of vehicle trips was applied to driveways and roads servicing local development in the Site area and was carried through the road network.

For the other area catchments, given their location with respect to the study area, reductions to traffic volumes were made based on adopted distributions and the key routes from these catchment areas through the study area. These were primarily related to east-west movements along the Queensway and Lake Shore Boulevard West corridors and movements accessing the Gardiner Expressway.

The overall area traffic changes due to the new station are illustrated in **Figure 83**, whilst individual figures for each catchment area are provided in **Appendix D**.

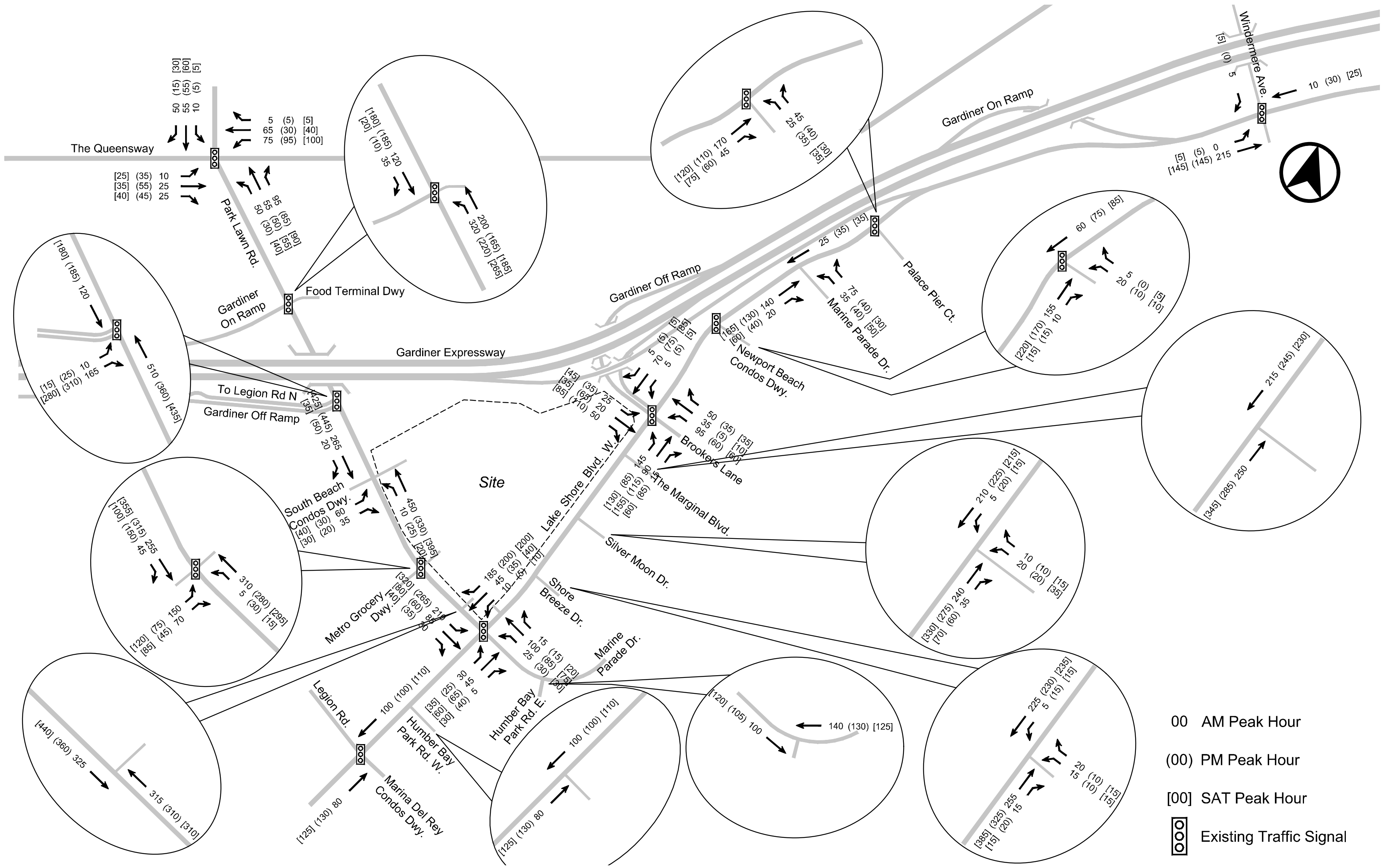


FIGURE 83 FUTURE AREA NETWORK CHANGES DUE TO STATION (REMOVAL)

9.3.3.2 Area Traffic Changes due to New Roads (diversion)

The following reviews the area traffic impact of the implementation of the new road infrastructure that is proposed to be delivered as part of the development.

The development proposes to deliver key road infrastructure which will change vehicle travel patterns through the study area. Most notably, the following changes to travel patterns are expected:

- The construction of the Relief Road will provide an alternate route between Park Lawn Road, north of the Site and Lake Shore Boulevard West, east of the Site, and is expected to result in some diversions which will alleviate Park Lawn Road and Lake Shore Boulevard West;
- The realignment of the Gardiner Expressway ramps to connect to the Relief Road will require any vehicles currently accessing the Gardiner Expressway at this location to divert to the new Relief Road connection.

In addition to the above, whilst not specifically associated with the development of the Site, the Legion Road extension proposed by the City of Toronto will provide an alternate route between the Gardiner Expressway Eastbound Off Ramp/Park Lawn Road, north of the Site and Lake Shore Boulevard West, west of the Site. This is also expected to result in some diversions which will further alleviate Park Lawn Road and Lake Shore Boulevard West. Furthermore, existing vehicle movements at locations where future turn restrictions are proposed will need to be diverted to alternate locations.

The overall area traffic changes due to the new roads are illustrated in **Figure 84**, whilst individual figures for each key piece of infrastructure discussed above are provided in **Appendix D**.

9.3.3.3 Background Developments

As discussed above, a separate assignment was undertaken by BA Group for background traffic on the basis that the Site is developed. This assignment was undertaken for the same developments outlined in **Table 30** and includes allowances for:

- Interactions associated with the mixed use nature of the Site;
- Projected mode split shifts associated with the construction of the transit station; or
- Diversions available along road infrastructure proposed to be constructed as part of the Site development.

The details of the projected adopted mode split shifts are outlined in **Section 5.0**.

The resultant background development traffic volumes (with development of the Site) are illustrated in **Figure 85**.

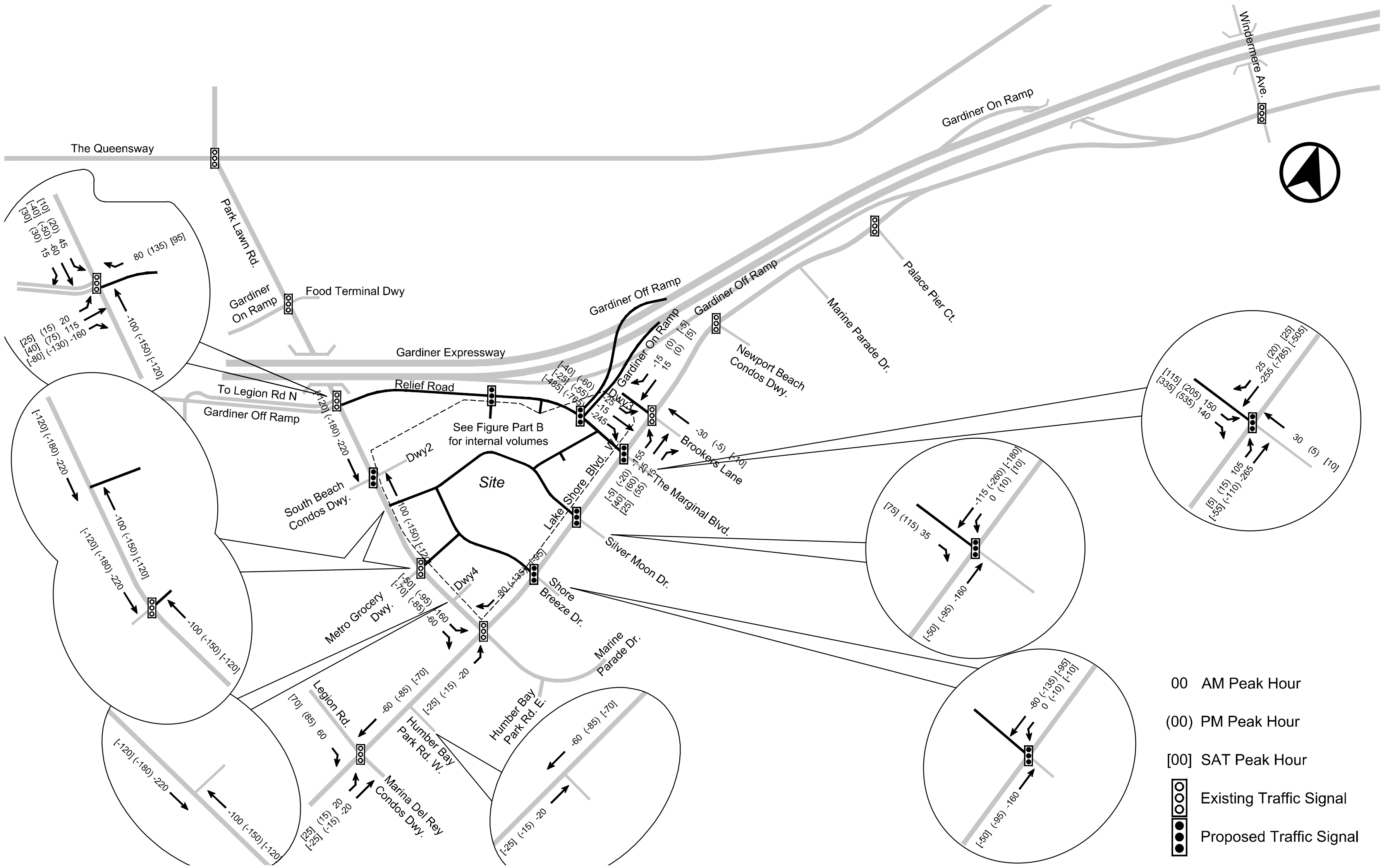


FIGURE 84A FUTURE AREA NETWORK CHANGES DUE TO NEW ROADS (DIVERSION) - EXTERNAL

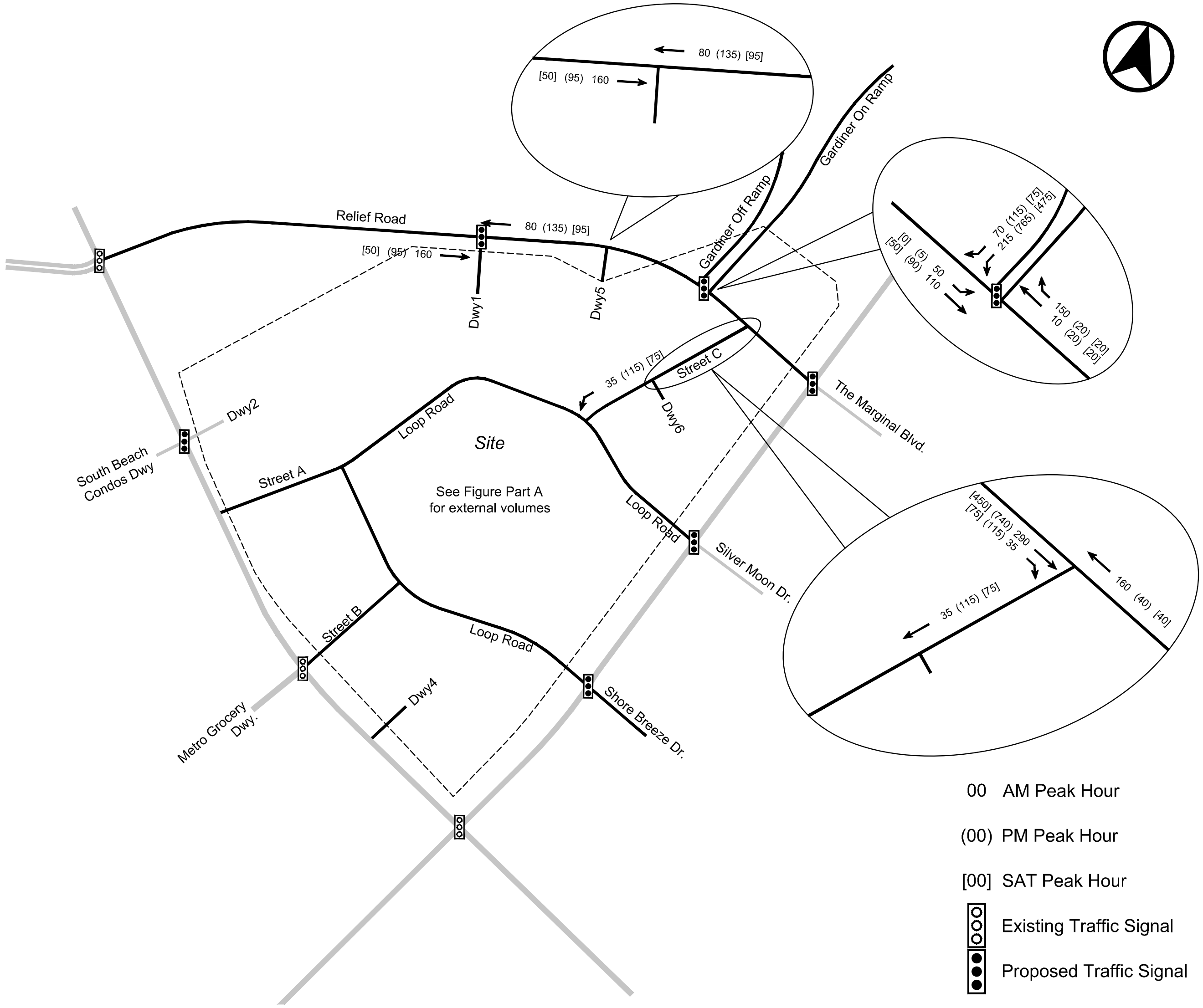


FIGURE 84B FUTURE AREA NETWORK CHANGES DUE TO NEW ROADS (DIVERSION) - INTERNAL

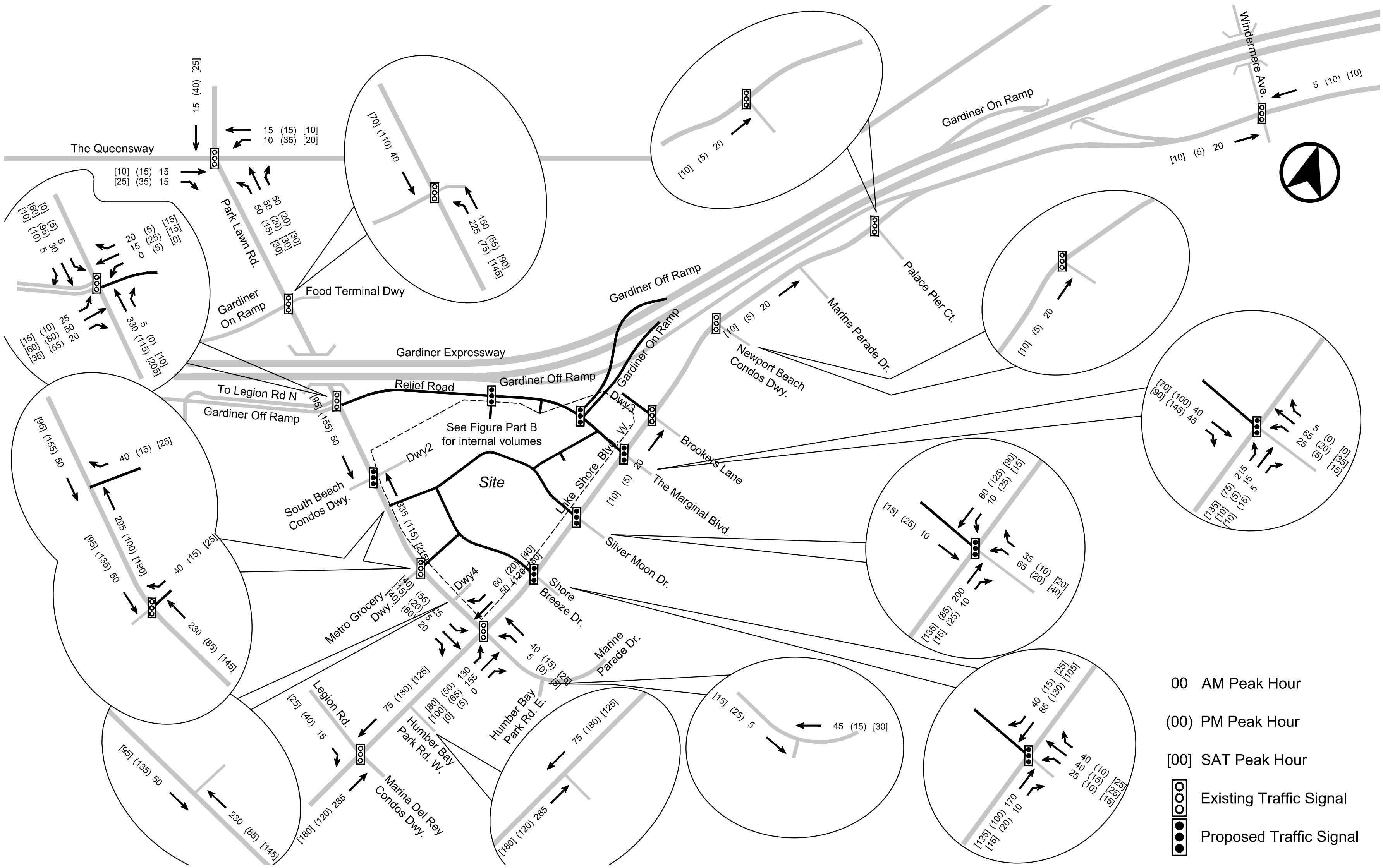


FIGURE 85A BACKGROUND TRAFFIC VOLUMES WITH DEVELOPMENT OF SITE - EXTERNAL

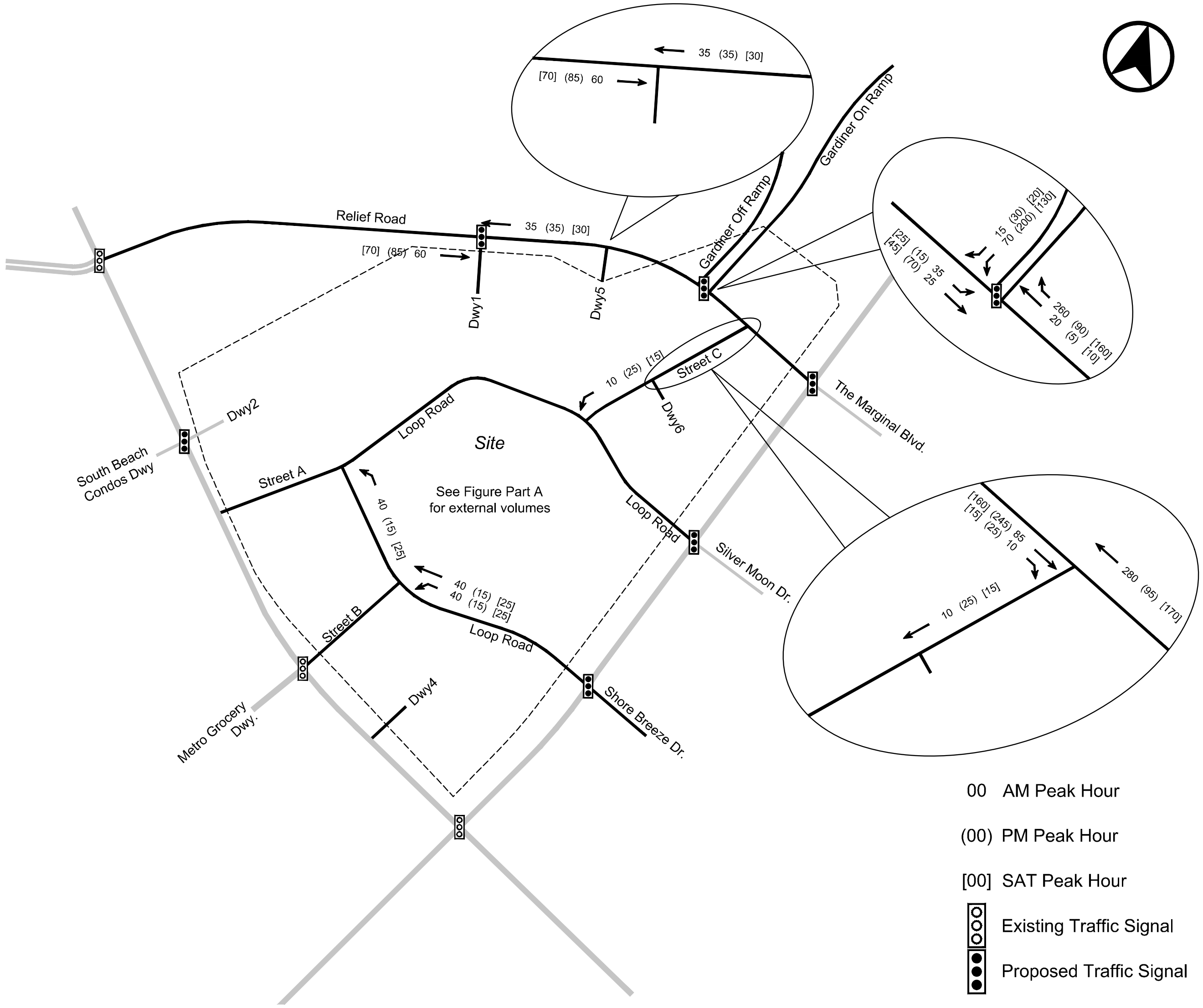


FIGURE 85B BACKGROUND TRAFFIC VOLUMES WITH DEVELOPMENT OF SITE - INTERNAL

9.3.3.4 Site Development Traffic Volumes

Existing Site Traffic Volumes

The Site is currently largely vacant, with the exception of a bank located at the southwest corner of the Site. There are currently seven driveways to the Site, including three to Park Lawn Road and four to Lake Shore Boulevard West. Two of the existing driveways service the bank, whilst the remaining driveways either provide occasional access to the Site as needed or are currently out of service.

As discussed in **Section 9.3.1**, traffic counts were undertaken at area intersections, including at existing Site driveways.

The Site currently generates in the order of **0**, **35**, and **50** vehicle trips during the weekday AM and PM, and Saturday peak hours, respectively.

The existing Site volumes are illustrated in **Figure 86**.

TABLE 100 EXISTING SITE VOLUMES

In	Out	2-Way
0 (10) [20]	0 (25) [30]	0 (35) [50]

Notes:
1. AM Peak (PM Peak) [Saturday Peak]

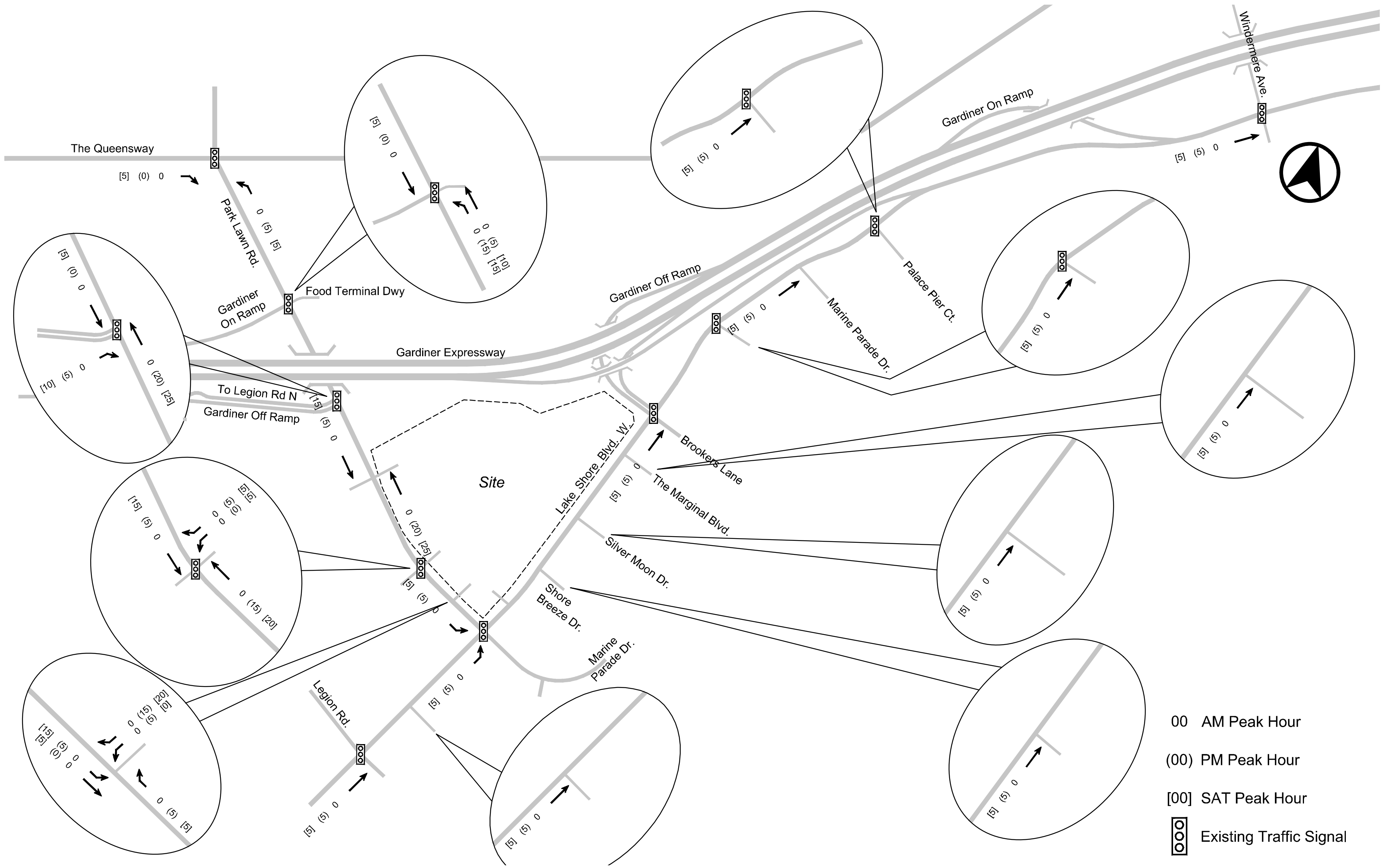


FIGURE 86 EXISTING SITE TRAFFIC VOLUMES (REMOVAL)

Site Development Traffic Volumes

The primary Site uses considered are as follows:

- Residential
- Office
- Retail
- Hotel

The Site development traffic volumes are outlined in **Section 6.0** and are summarized in **Table 101**. The total Site development volumes are illustrated in **Figure 83**, whilst individual traffic layers for each land use are provided in **Appendix D**.

TABLE 101 SITE DEVELOPMENT TRAFFIC VOLUMES

Land Use	In	Out	2-Way
Residential	170 (575) [360]	810 (255) [470]	980 (830) [830]
Residential PUDO[2]	20 (15) [15]	20 (15) [15]	40 (30) [30]
Office	135 (30) [20]	20 (120) [20]	155 (150) [40]
Retail	95 (350) [820]	20 (350) [825]	115 (700) [1,645]
Primary Retail	*95 (230) [605]*	*20 (230) [610]*	*115 (460) [1,215]*
Pass-by Retail	*0 (120) [215]*	*0 (120) [215]*	*0 (240) [430]*
Hotel	50 (50) [50]	50 (50) [50]	100 (100) [100]
Total	**470 (1,020) [1,265]**	**920 (790) [1,380]**	**1,390 (1,810) [2,645]**

Notes:
1. AM Peak (PM Peak) [Saturday Peak]
2. PUDO volumes assume two vehicle trips per Site person trip to allow for inbound and outbound movement of driver.

Site Development Traffic Distribution

The projected distribution and associated mode split of residential, hotel and office trips are outlined in **Section 5.0**. On the basis of this information, a direction of approach for vehicles has been determined for each of these land uses.

With respect to the retail, trips outside of those generated from within the immediate Site area are expected to remain relatively local in nature, generally within an approximate 5 minute drive of the Site. In this respect, external retail trips are expected to generally originate from the Mimico neighbourhood to the west, the Queensway neighbourhood to the north and the Swansea neighbourhood to the northeast. A direction of approach for vehicles has therefore been determined on the basis of these catchment areas and their respective populations.

The adopted Site traffic distributions are summarized in **Table 102**.

TABLE 102 SITE TRAFFIC DISTRIBUTION

Route	Direction	Residential / Hotel	Office	Retail
The Queensway	East	10%	10%	20%
	West	5%	5%	15%
Park Lawn Road	North	0%	5%	15%
Gardiner Expressway	East	30%	65%	0%
	West	45%	10%	0%
Lake Shore Boulevard West	East	5%	0%	10%
	West	5%	5%	40%
Total		**100%**	**100%**	**100%**

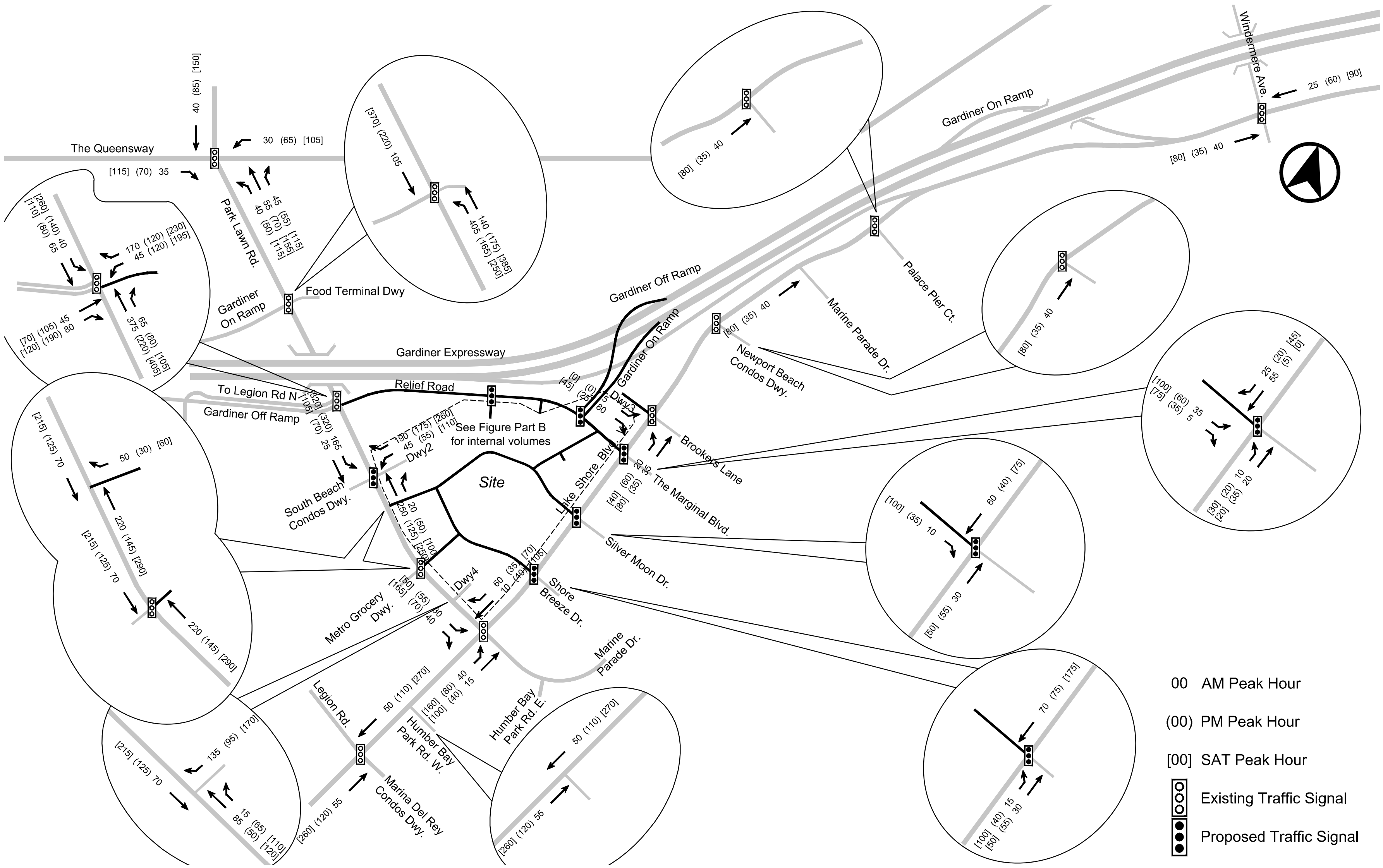


FIGURE 87A SITE DEVELOPMENT TOTAL TRAFFIC VOLUMES - EXTERNAL

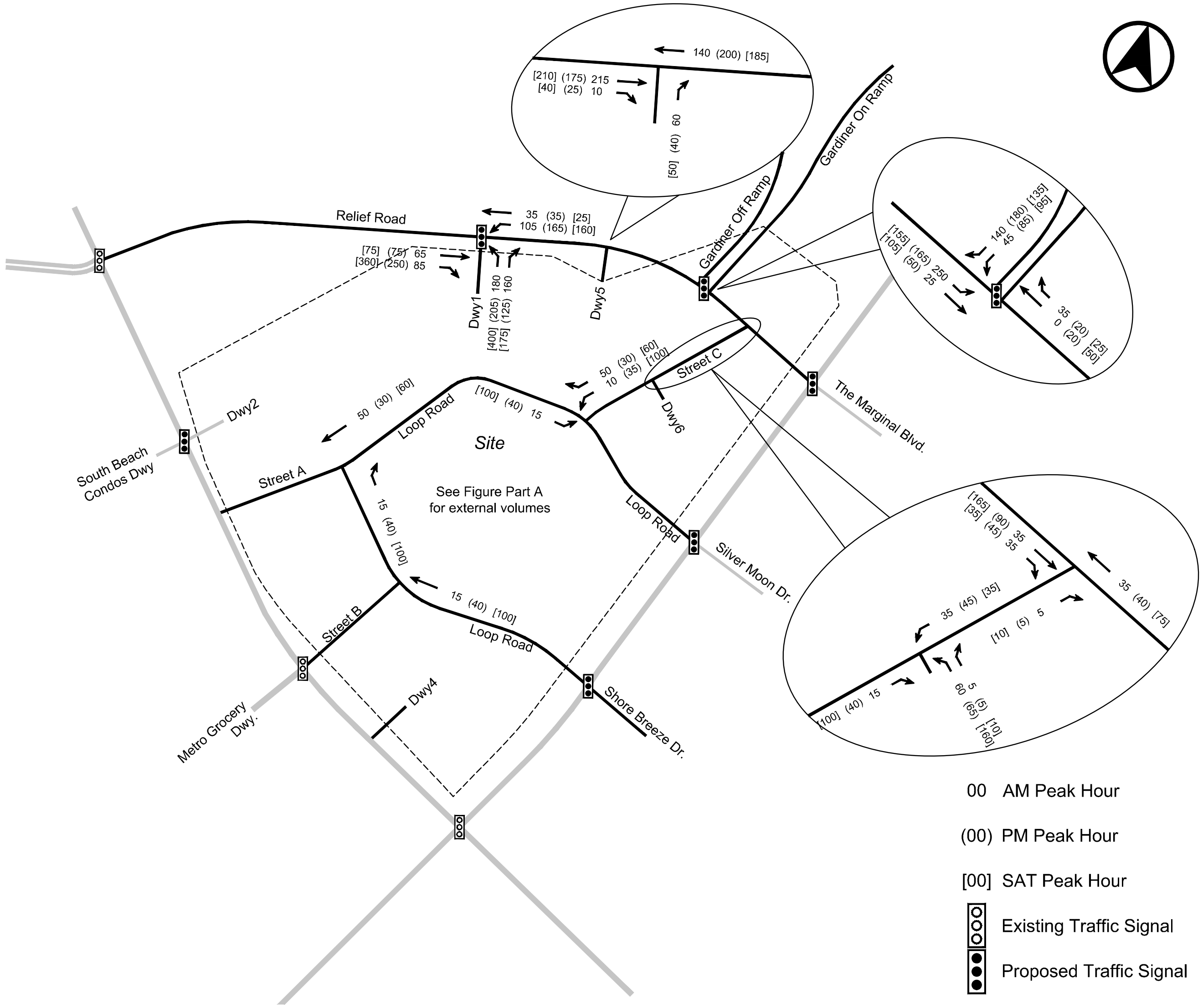


FIGURE 87B SITE DEVELOPMENT TOTAL TRAFFIC VOLUMES - INTERNAL

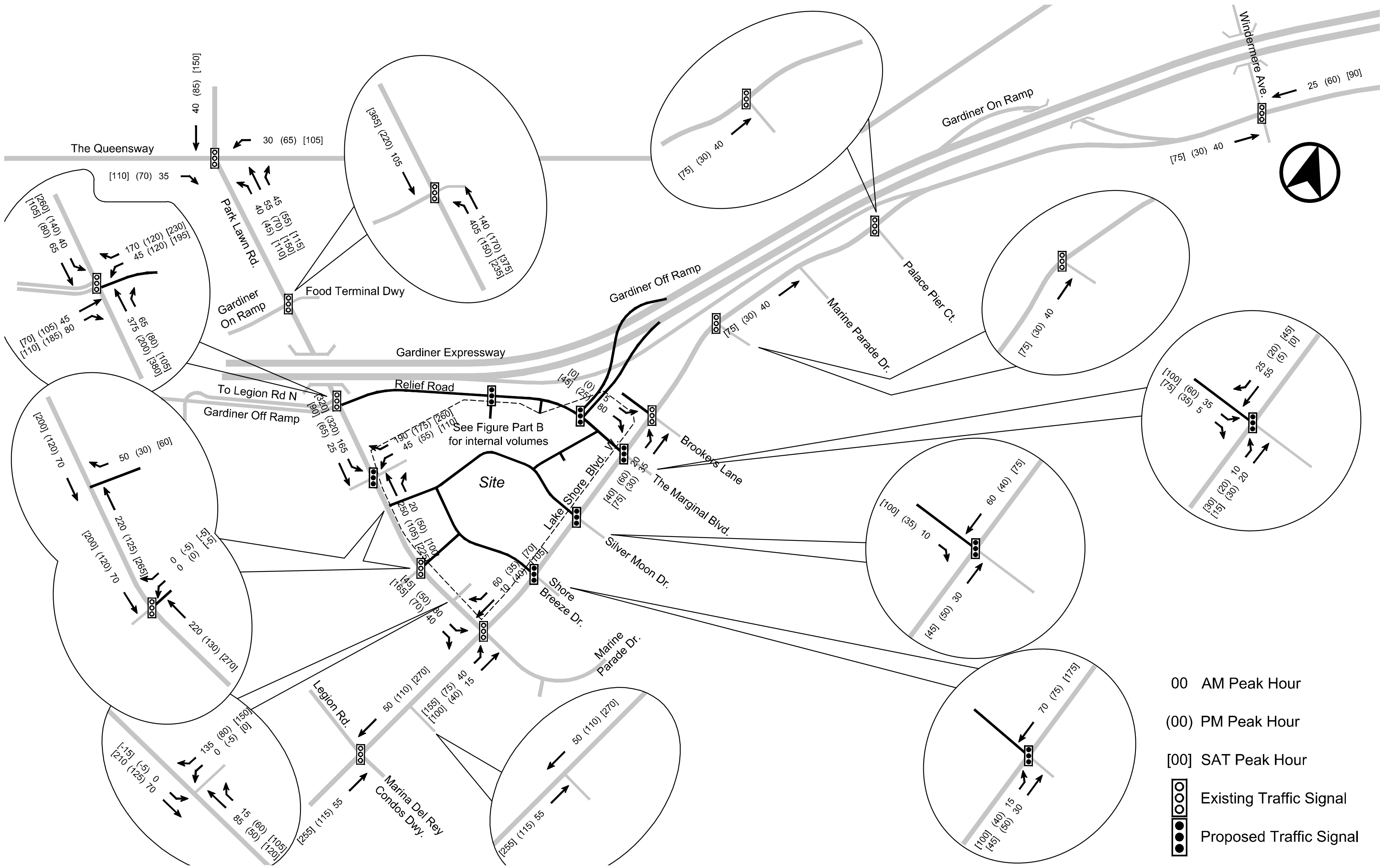


FIGURE 88A NET NEW SITE DEVELOPMENT TRAFFIC VOLUMES - EXTERNAL

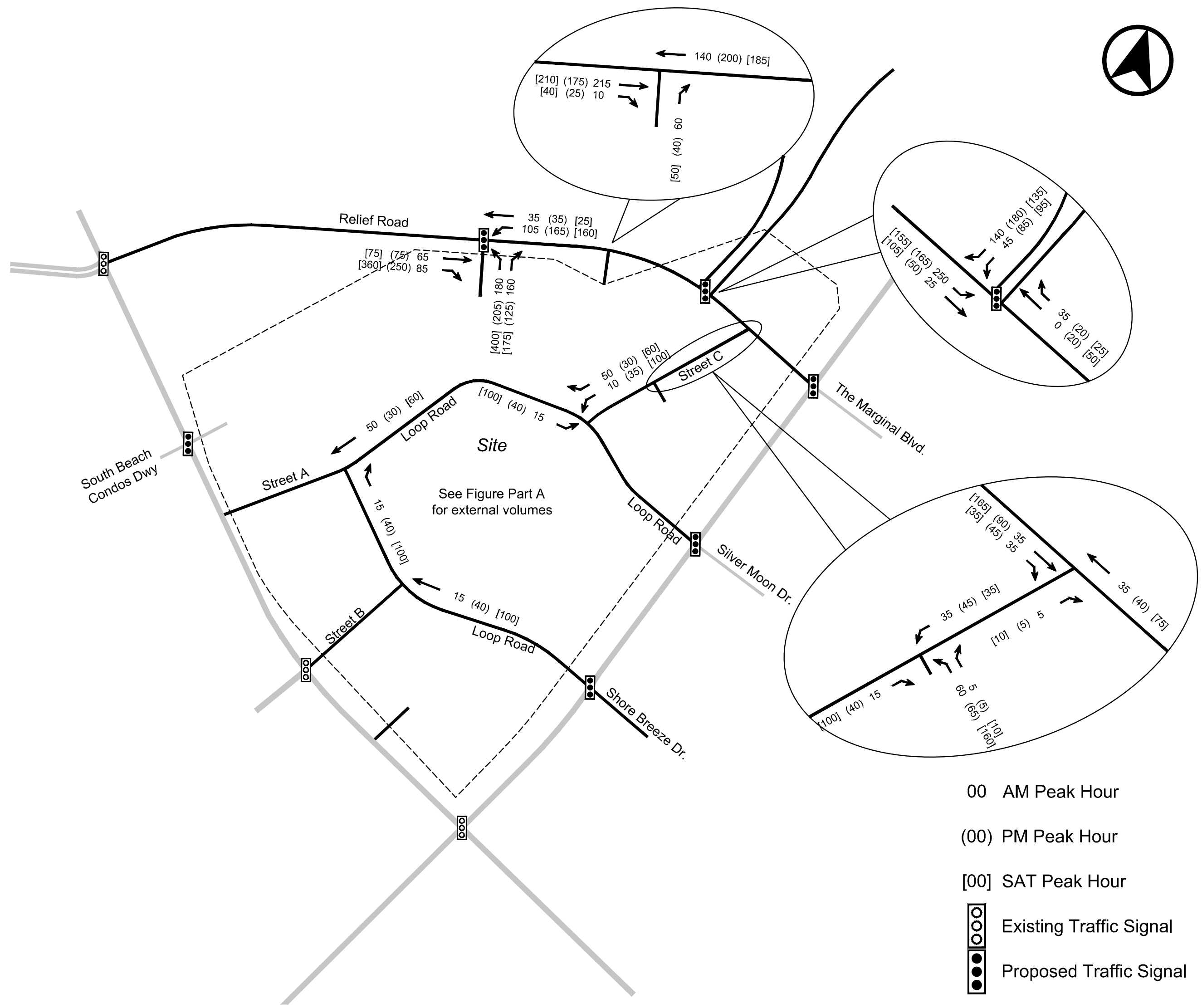


FIGURE 88B NET NEW SITE DEVELOPMENT TRAFFIC VOLUMES - INTERNAL

9.3.3.5 Site Transit Station Related Traffic (Pick Up/Drop Off)

Projected transit hub forecasts are outlined in **Section 7.0**, along with projected travel modes to and from the station.

The vehicle related travel to and from the station is summarized in **Table 103**. It is noted that given the nature of pick up/drop off, each trip to or from the station comprises two vehicle trips.

The total Site transit station volumes are illustrated in **Figure 89**, whilst layers for the individual zones are provided in **Appendix D**.

TABLE 103 SITE TRANSIT STATION VOLUMES (PICK UP/DROP OFF)

Zone	In	Out	2-Way
Primary	45 (40) [45]	45 (40) [45]	90 (80) [90]
Secondary	55 (50) [55]	55 (50) [55]	110 (100) [110]
Tertiary	25 (25) [25]	25 (25) [25]	50 (50) [50]
Peripheral	20 (15) [15]	20 (15) [15]	40 (30) [30]
Total	**145 (130) [140]**	**145 (130) [140]**	**290 (260) [280]**

Notes:
1. AM Peak (PM Peak) [Saturday Peak]
2. PUDO volumes assume two vehicle trips per Site person trip to allow for inbound and outbound movement of driver.

9.3.3.6 Future Total Traffic Volumes Summary

Future total volumes are the sum of the following:

- Existing Traffic Volumes as established in **Section 9.3.1**.
- Area Traffic Changes due to the new transit station (removal)
- Area Traffic Changes due to new street infrastructure (diversion)
- Background Development related traffic (with development of the Site)
- Existing Site traffic (removal)
- New Site Development related traffic
- New Site Transit Station Traffic

Future Total traffic volumes are illustrated in **Figure 90**, whilst the details of each layer are provided in **Appendix D**.

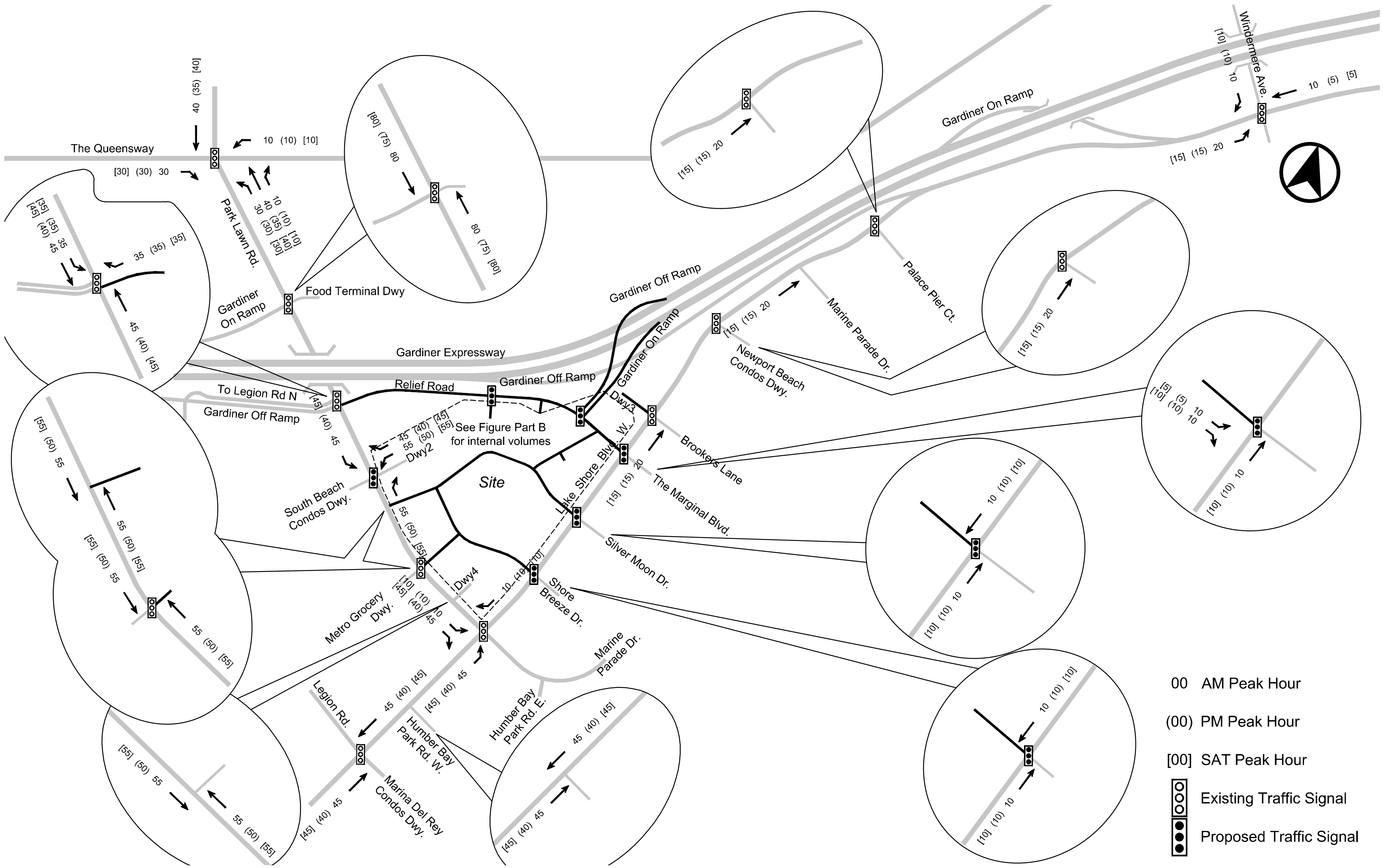


FIGURE 89A SITE TRANSIT STATION RELATED TRAFFIC (PICK UP/DROP OFF) - EXTERNAL

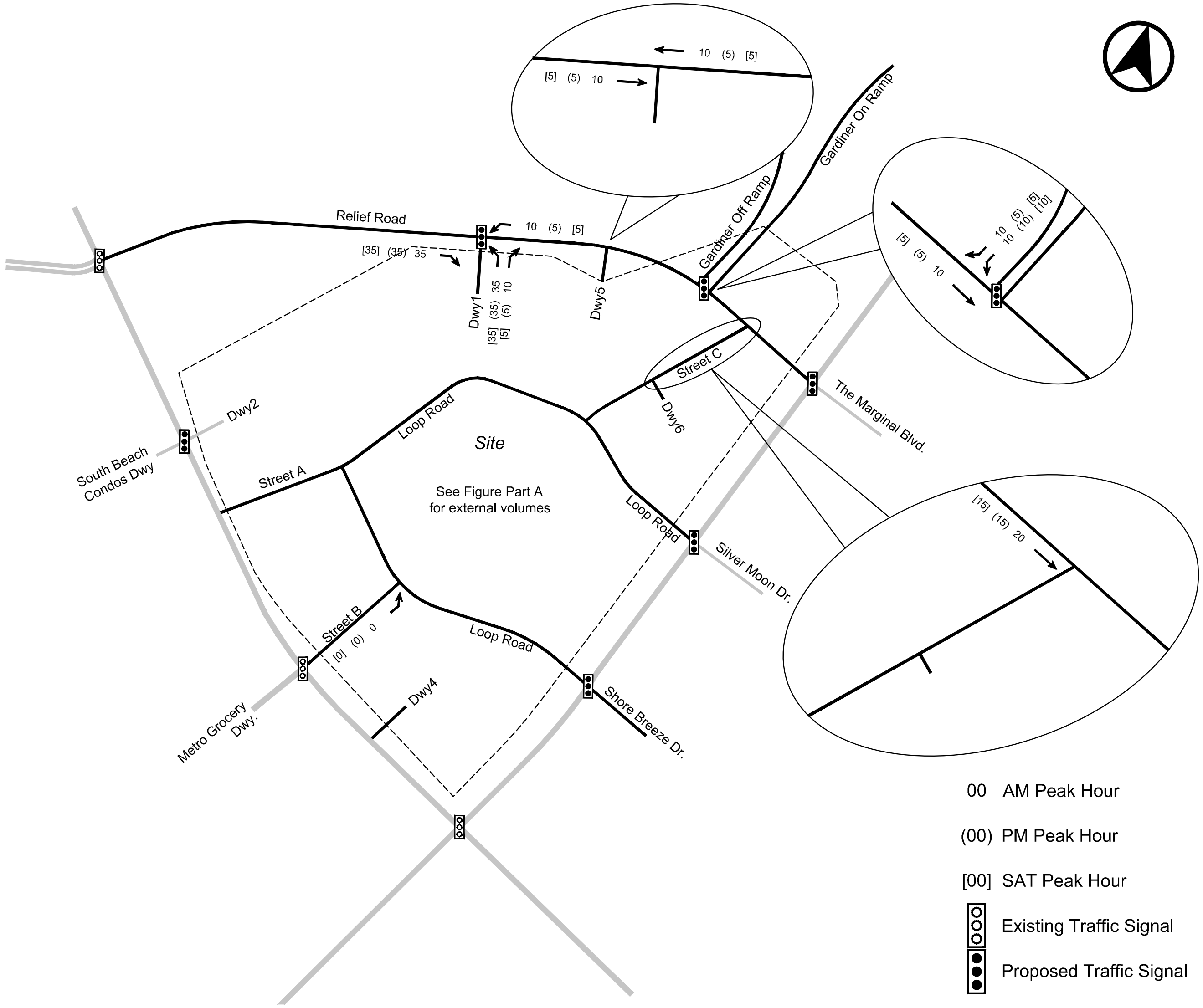


FIGURE 89B SITE TRANSIT STATION RELATED TRAFFIC (PICK UP/DROP OFF) - INTERNAL

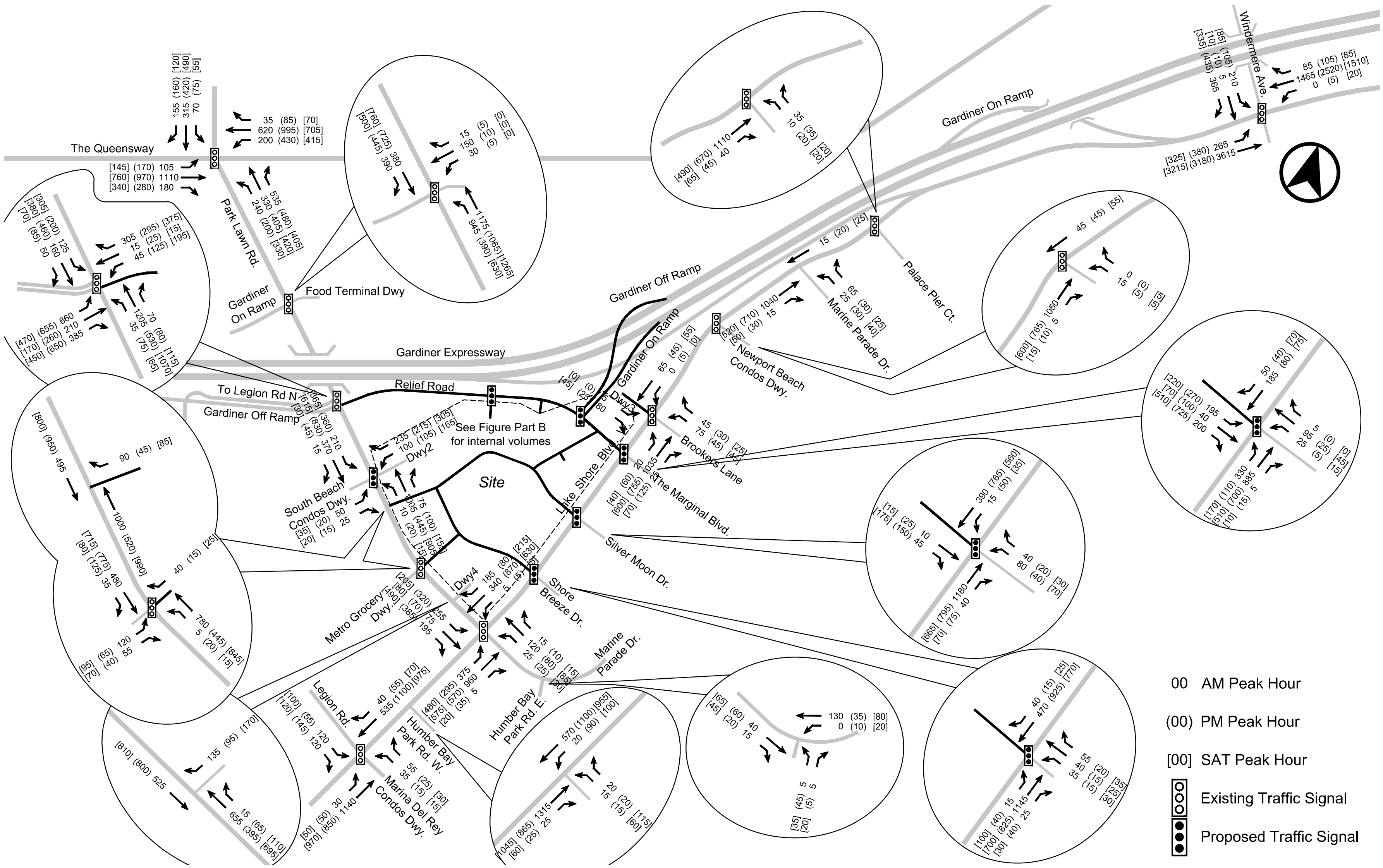


FIGURE 90A FUTURE TOTAL TRAFFIC VOLUMES - EXTERNAL

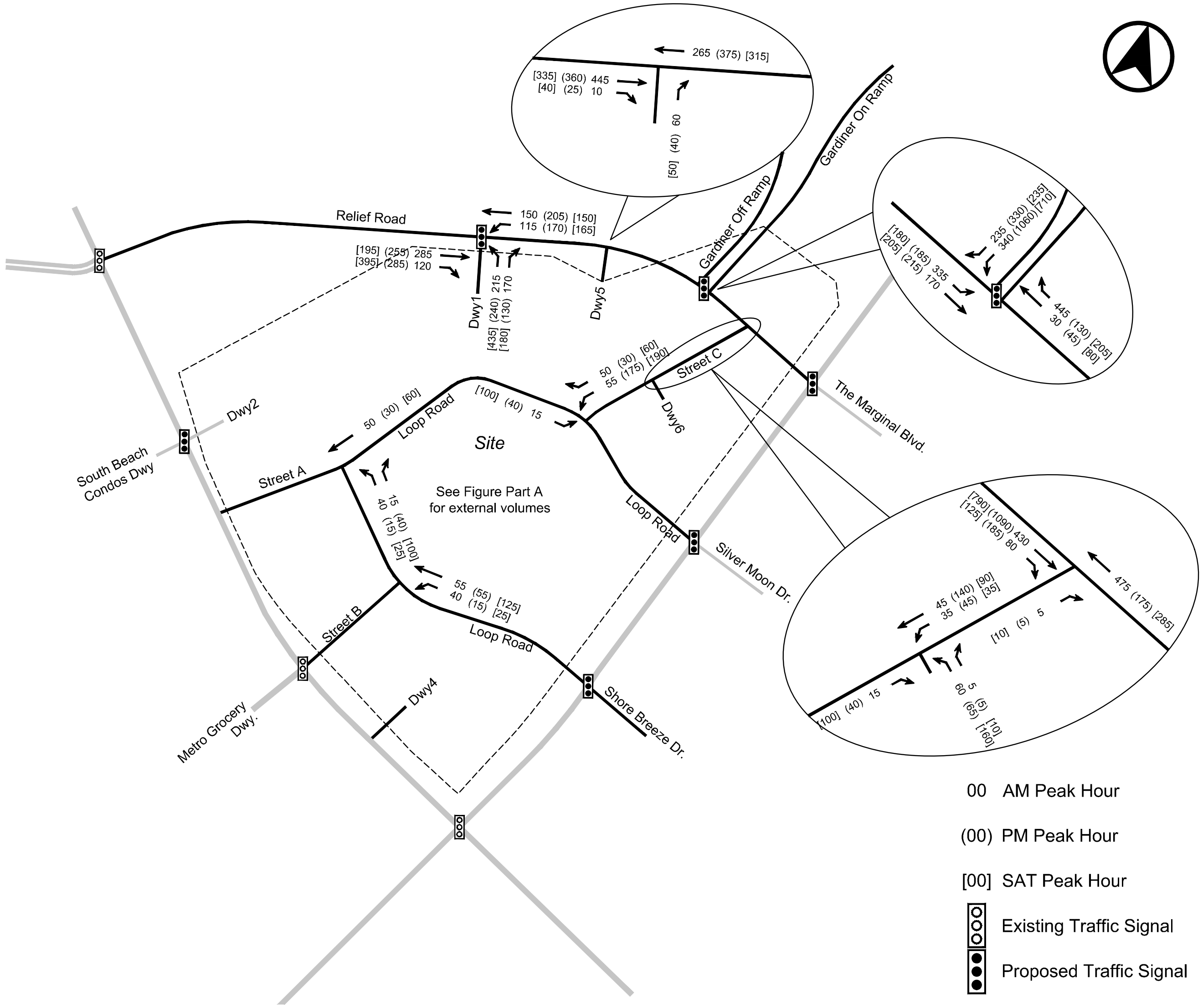


FIGURE 90B FUTURE TOTAL TRAFFIC VOLUMES - INTERNAL

9.4 TRAFFIC OPERATIONS ANALYSIS

The following section provides an assessment of existing and future traffic operating conditions on the area road system, considering area development and the proposed Christies Master Plan.

9.4.1 Methodology and Model Assumptions

Traffic operations analyses have been undertaken at the area intersections listed in **Section 9.2** using standard capacity analysis procedures as outlined below.

Signalized Intersections
Signalized intersection traffic operations analyses have been undertaken using the Synchro (version 9.0) capacity analysis software. Capacity analyses were undertaken during the weekday morning, weekday afternoon and Saturday peak hours for existing, future background and future total conditions.

Analyses have been undertaken in accordance with the methodologies outlined in the Highway Capacity Manual (HCM), which provides a 'level of service' (LOS) indicator for each turning movement / approach at the intersection. The LOS provides a measure of the average delay that motorist may experience when travelling through the intersection and ranges from "LOS A" (little delay) to "LOS F" (extended delay).

A complementary measurement also provided is a 'volume-to-capacity' ratio (v/c) for each movement, which provides a relative measure of the demand volume to capacity available to process the demand. A v/c ratio of 1.0 reflects 'at-capacity' conditions. The HCM methodology also provides an indication of the extent of any queuing on a particular movement or approach.

Unsignalized Intersections
Unsignalized intersection traffic operations analyses have also been undertaken using the Synchro (version 9.0) capacity analysis software. Capacity analyses were undertaken during the weekday morning, weekday afternoon and Saturday peak hours for Existing, Future Background and Future Total conditions.

Unsignalized STOP controlled intersection traffic operations have been undertaken in accordance with the methodologies outlined in the Highway Capacity Manual (HCM). The HCM methodology provides a Level of Service (LOS) designation for turning movements of an intersection.

The LOS designation ranges from LOS A to LOS F which provides an understanding of the relative time a motorist may have to wait, on average, to complete a turn at an unsignalized intersection or driveway. LOS A designation is reflective of a condition were motorists may experience little delay while turning at a STOP controlled intersection while LOS F designation is reflective of extended delays.

9.4.1.1 Network Wide Parameters

Signal Timings

Existing signal timings, phasing plans, and cycle lengths were obtained from the City of Toronto, and are provided in **Appendix E.**

Analyses at the area signalized intersections were generally undertaken using the existing signal timing plans under existing conditions. The exception to this is at the Park Lawn Road / Gardiner Expressway Eastbound Off Ramp / Legion Road intersection, where a study of the actual timings indicated that more time was allocated to the eastbound movements than indicated in the signal timing plan for that intersection during the PM peak and Saturday peak. On this basis, a split of 42 seconds and 40 seconds was adopted for the eastbound movement during the PM and Saturday peaks respectively. The study is attached in **Appendix F**.

Optimized traffic signal timings were adopted in the analyses of future traffic scenarios, where required, to best accommodate future traffic demands and patterns. Note that existing cycle lengths and pedestrian minimum times were generally maintained in all scenarios, with the exception of the following changes which were adopted and recommended for consideration:

- The cycle length at the Park Lawn Road / Gardiner Expressway Eastbound Off Ramp / Legion Road / Relief Road intersection was increased to 144 seconds during the AM and PM peak hours and to 128 seconds during the Saturday peak hour under Future Total conditions (from 104 seconds in the AM peak hour and 88 seconds in the PM and Saturday peak hours), to allow the additional time required to accommodate the addition of the Relief Road. The above cycle lengths are consistent with the Park Lawn Road/The Queensway intersection to the north.

- The cycle length at the Park Lawn Road / Gardiner Expressway Westbound On Ramp / Ontario Food Terminal intersection was also increased to 144 seconds during the AM and PM peak hours and to 128 seconds during the Saturday peak hour under Future Total conditions (from 104 seconds in the AM peak and 88 seconds in the PM and Saturday peaks), consistent with the above.
- The minimum walk time at the Park Lawn Road / Gardiner Expressway Eastbound Off Ramp / Legion Road / Relief Road intersection was reduced to 7 seconds under Future Total conditions to allow additional time to be allocated to the east-west movements. The flash don’t walk time was maintained to ensure sufficient crossing time for pedestrians.

Other notable changes to signal timings which were adopted and are recommended for consideration include the following:

- The existing split phasing at the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive was removed under Future Total conditions. An associated change in lane configurations was adopted at this intersection to accommodate the removal of the split phasing, as outlined further in the Assumed Road Network section below.
- The northbound left movement at the Park Lawn Road / Gardiner Expressway Westbound On Ramp / Ontario Food Terminal intersection was changed to be fully protected due to the introduction of a second turn lane, as outlined further in the Assumed Road Network section below.

For the proposed new signalized intersections along Park Lawn Road, Lake Shore Boulevard West and the Relief Road, a cycle length of 140 seconds was adopted, consistent with the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersection.
It is also noted that it is proposed for streetcars to turn into and out of the Site at the future Lake Shore Boulevard West / Silver Moon Drive / Loop Road and Lake Shore Boulevard West / Shore Breeze Drive / Loop Road intersections respectively. To accommodate these streetcar movements, a separate streetcar phase was introduced at these intersections using a fifth “streetcar” approach.

Heavy Vehicle Assumptions
Heavy vehicle percentages incorporated into the analysis were based upon information obtained from the existing intersection turning movement counts.

Bicycle Conflicts and Crossing Pedestrians
Peak hour conflicting bicycle volumes and pedestrian volumes utilized in the existing analysis were based upon information obtained from the existing intersection turning movement counts. Under future total conditions, conflicting pedestrian volumes were increased to account for expected greater pedestrian activity in the area.

Lost Time Adjustments

The City of Toronto Synchro 9 guidelines specify a base lost time adjustment factor of -1.0 seconds (e.g. a total lost time per phase equal to the amber plus all-red time minus 1 second). This was adopted in the analysis as the default value.

In some instances, alternate lost time adjustment factors were adopted where existing intersection operations as reported by Synchro were calibrated to more accurately reflect actual existing operating conditions. Further details of adopted calibrations are provided in **Section 9.4.1.2**.

Peak Hour Factor

The City of Toronto Synchro 9 guidelines specify that default peak hour factors should be used except where Site-specific values can be calculated from existing traffic count information.

For existing intersections within the study area, the peak hour factors were calculated based on the obtained traffic data.

For new intersections under future conditions, default peak hour factors where adopted as outlined in the City of Toronto Synchro 9 guidelines, as follows:

- Peak hour factor of 0.90 during the AM peak hour;
- Peak hour factor of 0.90 for left turn movements during the PM peak hour; and
- Peak hour factor of 0.95 for all other movements during the PM peak hour.

Assumed Road Network

The existing road network configuration was assumed for the existing analysis, as shown in **Figure 76**.

The Future Background road network configuration was assumed as shown in **Figure 77** with some minor changes as outlined in the Traffic Impact Study prepared by MMM Group and AECOM for the Humber Bay Shores development.

The Future Total analysis assumed the road network configuration as shown in **Figure 78**. In addition to the new intersections and intersection approaches proposed as part of the development, the following notable additional road network changes were adopted and are recommended for consideration:

- Provision of a short eastbound right turn lane at the Park Lawn Road / The Queensway intersection.
- Provision of an additional short northbound left turn lane at the Park Lawn Road/Gardiner Expressway Westbound On Ramp/Ontario Food Terminal intersection. As discussed above, this movement was changed to run fully protected as a result.
- Provision of an additional northbound through lane at the Park Lawn Road / Gardiner Expressway Eastbound Off Ramp / Legion Road / Relief Road intersection.
- Conversion of the existing combined northbound left/through lane at the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersection to be a northbound left turn lane only, allowing the split phasing to be removed as discussed above.
- Signalization of the Site connections to Lake Shore Boulevard West at Shore Breeze Drive, Silver Moon Drive and the Marginal Boulevard and lane configuration changes primarily associated with the accommodation of the streetcar tracks, including
    - No left turns into the Marginal Boulevard and Shore Breeze Drive.
    - Separate allowance for streetcar movements.
- Signalization of the Site connection to Park Lawn Road at the South Beach Condos driveway.

9.4.1.2 Model Calibration

Calibrations were undertaken at some intersections as required, such that existing conditions as reported by Synchro more accurately reflected actual operating conditions and v/c ratios on turning movements under existing conditions were equal to no more than 1.0.

The calibrations undertaken are summarized in **Table 104**, whilst calibration studies are attached in **Appendix F**.

TABLE 104 SUMMARY OF MODEL CALIBRATIONS

Intersection	Calibration	AM Peak	PM Peak	Saturday Peak
Lake Shore Blvd W / Marine Parade Dr	NBLR Control Delay[1]	32	25	16
Lake Shore Blvd W / Shore Breeze Dr	NBLR Control Delay[1]	30	37	22
Lake Shore Blvd W / Silver Moon Dr	NBLR Control Delay[1]	46	38	39
Lake Shore Blvd W / Windermere Ave / Sir Casimir Gzowski Park Dwy	EBL protected factor	-	1	-
	EBL Lost Time Adjust	-	-2	-
	WBT lane utilization factor	-	1	-
	WBT Lost Time Adjust	-	-2	-
	SBR turn factor	-	0.95	-
Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd	EBR right turn on red saturation flow[2]	-	633	597
Park Lawn Rd / Gardiner Westbound On Ramp / Ontario Food Terminal	NBL Lost Time Adjust[3]	-4	-	-4
Park Lawn Rd / The Queensway	WBL Lost Time Adjust[3]	-2	-2	-2

Notes:
1. Control delay calibrations made via critical and follow up gap adjustments, based on delay studies (attached in Appendix F).
2. Calibration made based on right turn on red study (attached in Appendix F) and right turn on red saturation flow rate equation detailed on page 8-11 of the Synchro Studio 9 User Guide. This calibration was not carried forward to future scenarios due to the adopted removal of the channelized right turn lane.
3. Calibration made based on result of intergreen study (attached in Appendix F).

9.4.2 Traffic Analysis Results Overview

An overview of the overall area street network operations under Existing, Future Background, and Future Total traffic conditions are briefly discussed in **Sections 9.4.2.1**, **Section 9.4.2.2**, and **Section 9.4.2.3**, respectively.

The traffic operations analysis results for the key area signalized and unsignalized intersections are discussed in greater detail in **Section 9.4.2**.

9.4.2.1 Existing Traffic Conditions Overview

Existing challenges in the area generally revolve around the following:

- Volumes on the Gardiner Expressway can result in motorists diverting to and using the area roads to bypass the congestion; and
- The Gardiner Expressway overpass, the rail overpass and Lake Ontario limit the available outlets from the area, with Park Lawn Road serving as the only major north-south connection in the vicinity,

Generally, the above results in increased congestion along the Park Lawn Road and Lake Shore Boulevard West corridors.

Further to the above, whilst the area road network is currently operating within theoretical capacity, there are a number of intersections/movements which are in high demand, including:

- The Park Lawn Road / The Queensway intersection is approaching capacity under all analysis periods;
- High demand for the northbound left turn movement at the Park Lawn Road / Gardiner Expressway Westbound On Ramp / Ontario Food Terminal intersection, primarily during the AM peak hour.
- High demand for movements off the Gardiner Expressway at the Park Lawn Road / Gardiner Expressway Eastbound Off Ramp / Legion Road intersection, particularly during the PM peak hour.
- High demands at the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersection.
- High demand for movements off the Gardiner Expressway at the Lake Shore Boulevard West / Gardiner Eastbound On Ramp / Gardiner Westbound Off Ramp / Brookers Lane, particularly during the PM peak hours.
- Eastbound movements along the Lake Shore Boulevard West corridor are approaching capacity in the single lane section to the east of the Site, primarily during the AM peak hour.
- The Lake Shore Boulevard West / Windermere Avenue / Sir Casimir Gzowski Park Driveway intersection is approaching capacity, particularly during the PM peak hour.
- Movements out of the side roads at unsignalized intersections to Park Lawn Road and Lake Shore Boulevard West have extended delays.

An overview graphic of existing traffic operations is provided in **Figure 91**. Full intersection Synchro results are provided in tabular format in **Appendix G**. All Existing traffic condition Synchro reports are provided in **Appendix H**.

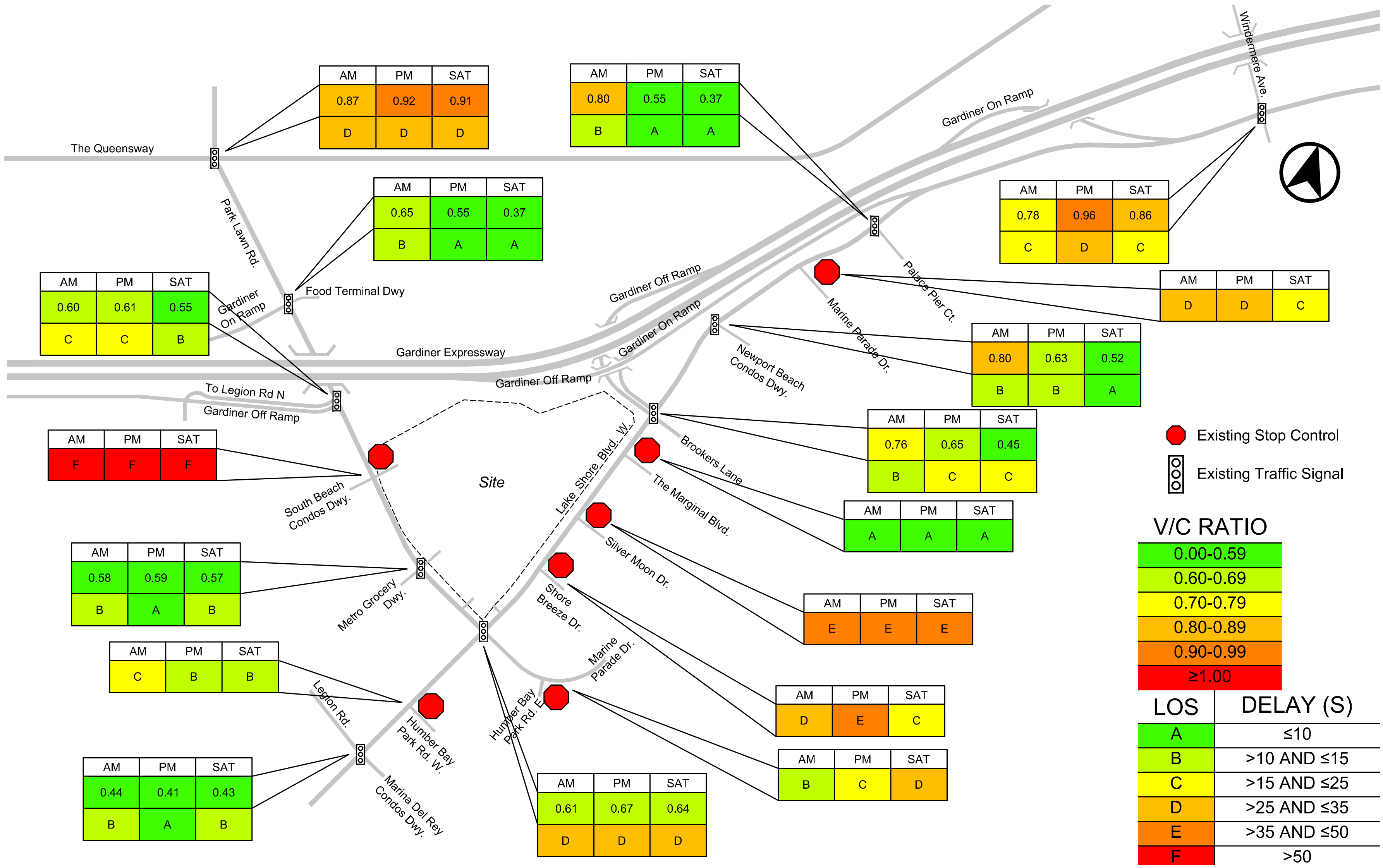


FIGURE 91 EXISTING TRAFFIC CONDITIONS OVERVIEW

9.4.2.2 Future Background Traffic Conditions Overview

Under Future Background, without the benefit of the projected mode shift associated with the transit station or the new infrastructure and lane configuration changes proposed as part of the proposed development, a number of intersections or movements at intersections within the area are projected to exceed theoretical capacity, in particular the aforementioned intersections which are approaching capacity under existing conditions.

An overview graphic of future background traffic operations is provided in **Figure 92**. Full intersection Synchro results are provided in tabular format in **Appendix G**. All Future Background traffic condition Synchro reports are provided in **Appendix H**.

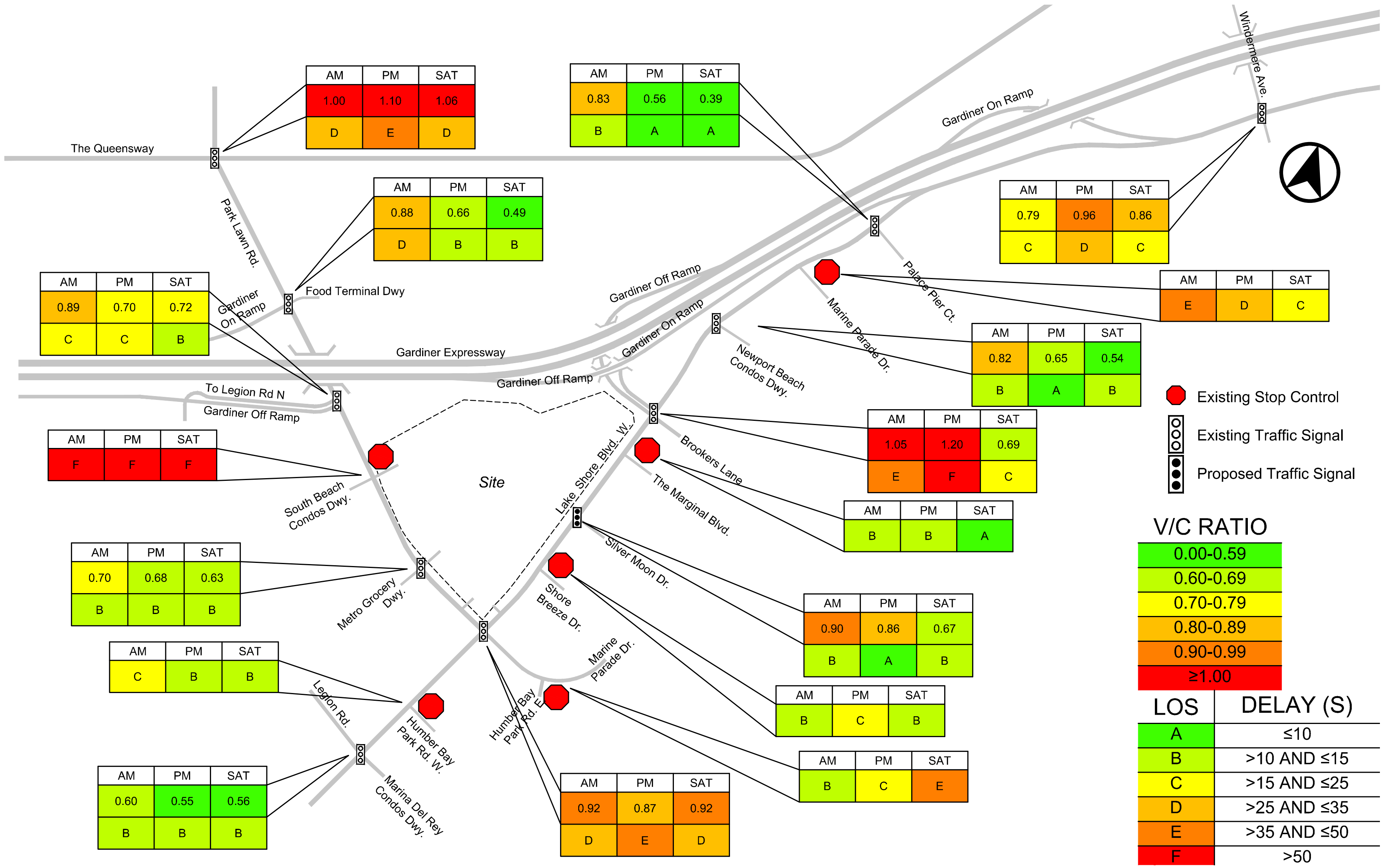


FIGURE 92 FUTURE BACKGROUND TRAFFIC CONDITIONS OVERVIEW

9.4.2.3 Future Total Traffic Conditions Overview

Overall, the road network is projected to operate within capacity under future total conditions, noting the benefit of the projected mode shift associated with the transit station or the new infrastructure and lane configuration changes proposed as part of the proposed development.

In particular, the relief along the Park Lawn Road and Lake Shore Boulevard corridors along the Site boundaries is notable, whilst many other area intersections are projected to operate under similar conditions to existing, subject to the recommendations outlined within this report.

An overview graphic of future total traffic operations is provided in **Figure 93**. Full intersection Synchro results are provided in tabular format in **Appendix G**. All Future Total traffic condition Synchro reports are provided in **Appendix H**.

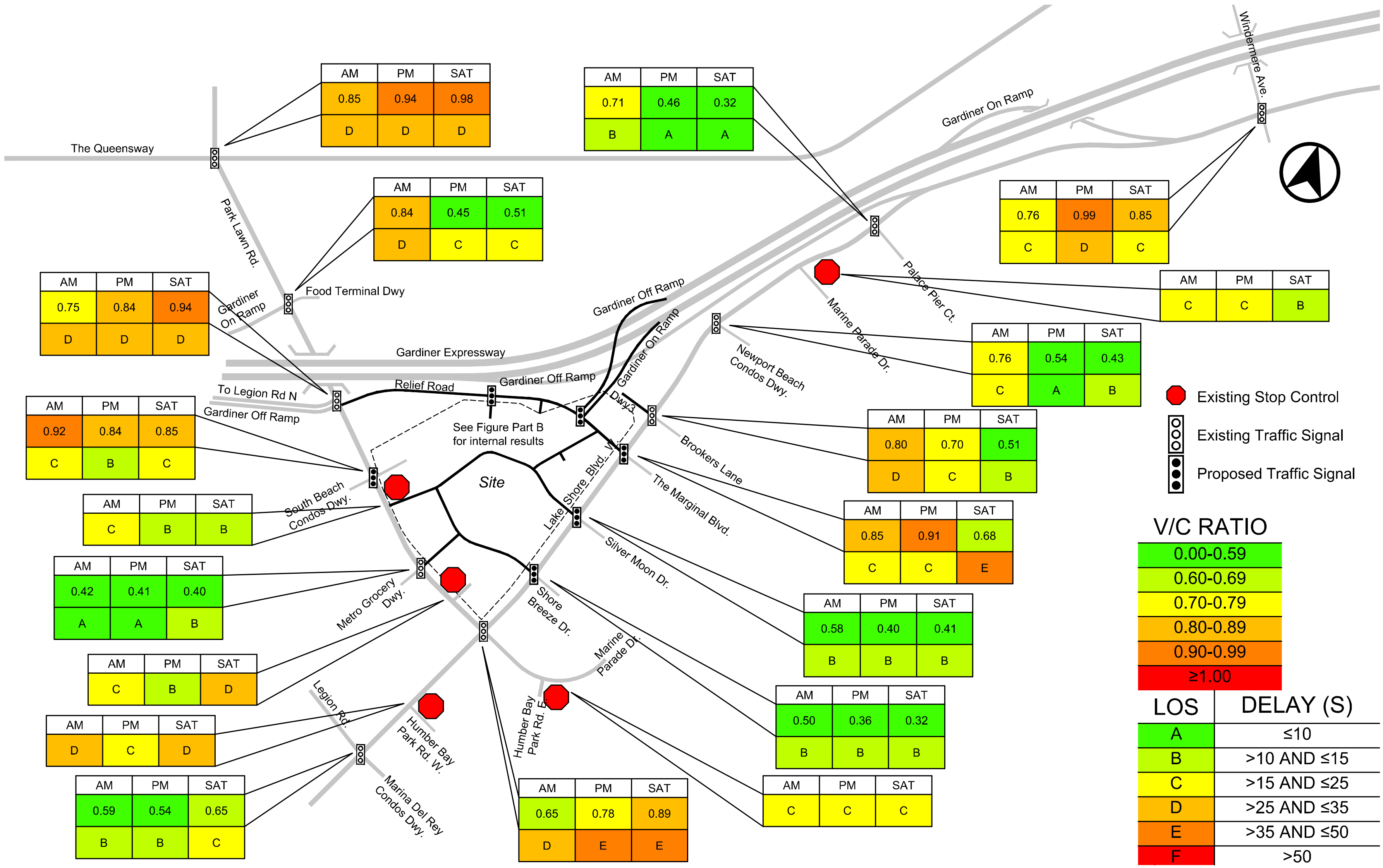


FIGURE 93A FUTURE TOTAL TRAFFIC CONDITIONS OVERVIEW - EXTERNAL

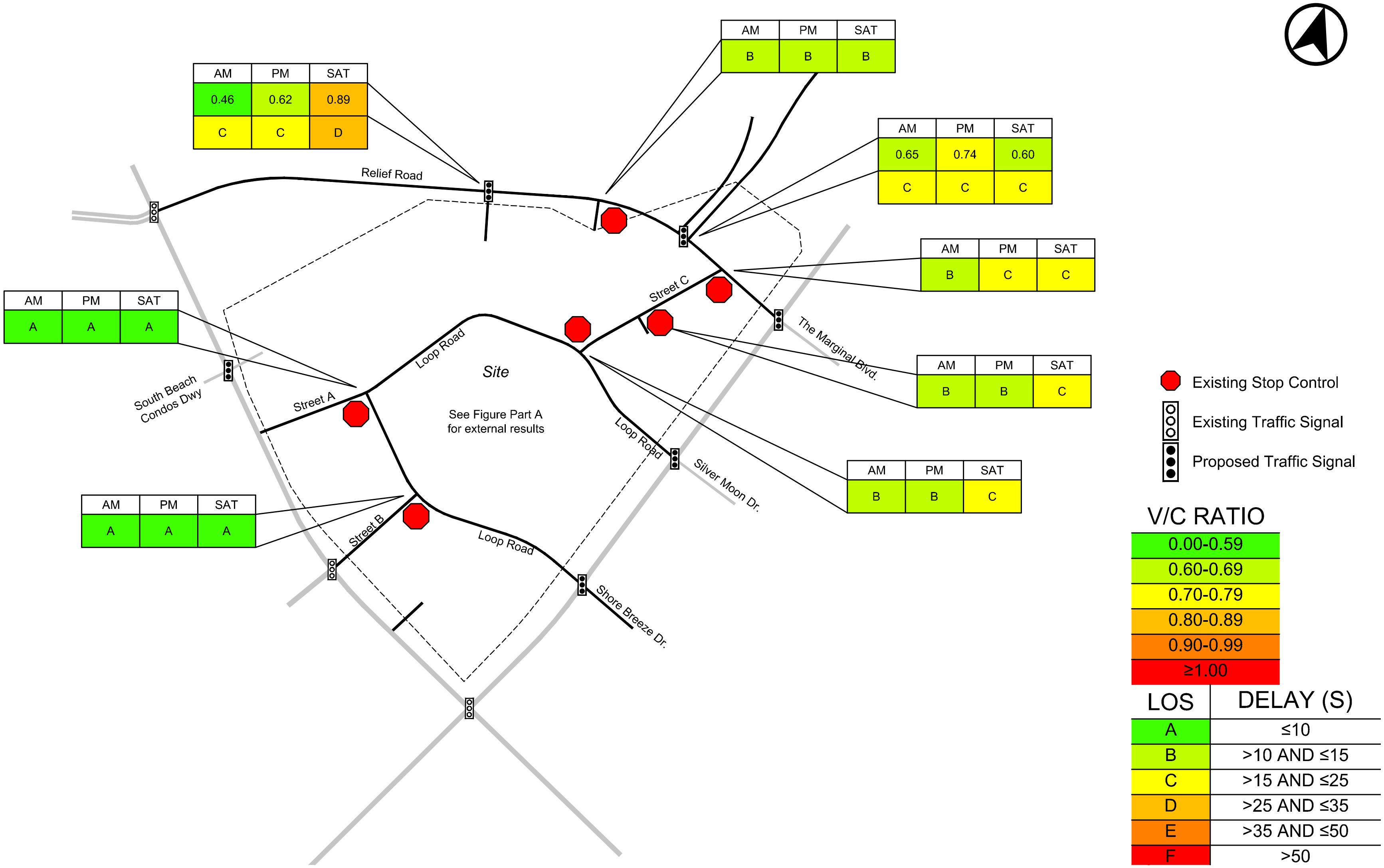


FIGURE 93B FUTURE TOTAL TRAFFIC CONDITIONS OVERVIEW - INTERNAL

9.4.3 Key Intersection Results

Signalized Intersections

The key signalized intersections discussed herein are as follows:

- Park Lawn Road / The Queensway
- Park Lawn Road / Gardiner Westbound On Ramp / Ontario Food Terminal
- Park Lawn Road / Gardiner Eastbound Off Ramp / Legion Road / Relief Road
- Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive
- Lake Shore Boulevard West / Gardiner Eastbound On Ramp / Gardiner Westbound Off Ramp / Brookers Lane
- Lake Shore Boulevard West / Relief Road / The Marginal Boulevard
- Relief Road / Gardiner Eastbound On Ramp / Gardiner Westbound Off Ramp

Park Lawn Road / The Queensway

The Park Lawn Road / The Queensway signalized intersection currently operates under SCOOT timings, with a cycle length up to 144 seconds during the AM and PM peak hours and up to 128 seconds during the Saturday peak hour.

Under existing conditions the intersection operates with overall V/C ratios of 0.87, 0.92 and 0.91 during the AM, PM and Saturday peak hours respectively.

Under future background, the intersection is projected to exceed theoretical capacity during the PM and Saturday peak hours, with overall V/C ratios of 1.00, 1.10 and 1.06 during the AM, PM and Saturday peak hours respectively.

Under future total, a short eastbound right turn lane was incorporated into the analysis and is recommended for consideration.

Subject to this recommendation, under future total, the intersection is projected to operate with overall V/C ratios of 0.85, 0.94 and 0.98 during the AM, PM and Saturday peak hours respectively.
It is noted that in addition to the abovementioned changes, future background and future total signal timings were optimized to best accommodate projected future traffic demands.

Operations are projected to generally improve under future total, compared with future background primarily due to the recommended lane configuration changes and the mode split shifts projected to be associated with the new transit station.
Overall, it is projected that future total traffic can be accommodated at this intersection, subject to the recommendations outlined above.

Park Lawn Road / Gardiner Westbound On Ramp / Ontario Food Terminal

The Park Lawn Road / Gardiner Westbound On Ramp / Ontario Food Terminal signalized intersection currently operates under SCOOT timings, with a cycle length up to 104 seconds during the AM peak and of 88 seconds during the PM and Saturday peak hours.

Under existing conditions the intersection operates with overall V/C ratios of 0.65, 0.55 and 0.37 during the AM, PM and Saturday peak hours respectively.

Under future background, the intersection is projected to exceed theoretical capacity during the AM peak hour, with overall V/C ratios of 0.88, 0.66 and 0.49 during the AM, PM and Saturday peak hours respectively. The increased overall V/C during the AM peak is primarily related to the northbound left turn movement, which is expected to exceed theoretical capacity due to a substantial projected increase in traffic to the Gardiner Expressway.

Under future total, an additional northbound left turn lane was incorporated into the analysis and is recommended for consideration, with the northbound left movement to run fully protected. Furthermore, the cycle length is recommended to be increased to 144 seconds during the AM and PM peak hours and to 128 seconds during the Saturday peak hour, consistent with the Park Lawn Road / Gardiner Eastbound Off Ramp / Legion Road / Relief Road intersection discussed below.

Subject to the above recommendations, under future total, the intersection is projected to operate with overall V/C ratios of 0.84, 0.45 and 0.51 during the AM, PM and Saturday peak hours respectively.

It is noted that in addition to the abovementioned changes, future total signal timings were optimized to best accommodate projected future traffic demands.

Overall, it is projected that future total traffic can be accommodated at this intersection, subject to the recommendations outlined above.

Park Lawn Road / Gardiner Eastbound Off Ramp / Legion Road / Relief Road

The Park Lawn Road / Gardiner Eastbound Off Ramp / Legion Road signalized intersection currently operates under SCOOT timings, with a cycle length up to 104 seconds during the AM peak and of 88 seconds during the PM and Saturday peak hours.
Under existing conditions the intersection operates with overall V/C ratios of 0.60, 0.61 and 0.55 during the AM, PM and Saturday peak hours respectively.

Under future background, the intersection is projected to operate with overall V/C ratios of 0.89, 0.70 and 0.72 during the AM, PM and Saturday peak hours respectively.

Under future total, the construction of a fourth westbound approach (Relief Road) is included within the analysis, which will serve as a key gateway to the Gardiner Eastbound On and Westbound Off Ramps Furthermore, an additional northbound through lane was incorporated into the analysis and is recommended for consideration.

Changes were also incorporated and are recommended for consideration for the signal timings, including:

- Increasing the cycle length to 144 seconds during the AM and PM peak hours and to 128 seconds during the Saturday peak hour to allow the additional time required to accommodate the addition of the Relief Road (and consistent with the Park Lawn Road/The Queensway intersection to the north).
- The minimum walk time was reduced to 7 seconds to allow additional time to be allocated to the east-west movements. The flash don't walk time was maintained to ensure sufficient crossing time for pedestrians.
- A northbound left turn protected phase was introduced in the PM peak.

Subject to the above, under future total the intersection is projected to operate with overall V/C ratios of 0.75, 0.84 and 0.94 during the AM, PM and Saturday peak hours respectively.

It is noted that in addition to the abovementioned changes, future background and future total signal timings were optimized to best accommodate projected future traffic demands.

Overall, it is projected that future total traffic can be accommodated at this intersection, subject to the recommendations outlined above.

Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive

The Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive signalized intersection currently operates with a cycle length of 140 seconds during the AM, PM and Saturday peak hours with split phasing for the northbound and southbound approaches.

Under existing conditions the intersection operates with overall V/C ratios of 0.61, 0.67 and 0.64 during the AM, PM and Saturday peak hours respectively.

Under future background, the intersection is projected to operate with overall V/C ratios of 0.92, 0.87 and 0.92 during the AM, PM and Saturday peak hours respectively. It is noted that whilst the overall intersection V/C's remain under 1.00, the eastbound left turn is projected to exceed theoretical capacity during the Saturday peak hour.

Under future total, the existing split signal phasing was removed to allow a more efficient spread of the available time and is recommended for consideration. Associated changes to the northbound approach (convert the existing northbound left/through lane to a northbound left turn lane) were made to accommodate removal of the split timing.

Subject to the above recommendations, under future total, the intersection is projected to operate with overall V/C ratios of 0.65, 0.78 and 0.89 during the AM, PM and Saturday peak hours respectively.

It is noted that in addition to the abovementioned changes, future background and future total signal timings were optimized to best accommodate projected future traffic demands.

Operations are projected to generally improve under future total, compared with future background primarily due to the recommended signal phasing changes, the mode split shifts projected to be associated with the new transit station and the construction of the Relief Road alleviating pressure on this intersection.

Overall, it is projected that future total traffic can be accommodated at this intersection, subject to the recommendations outlined above.

Lake Shore Boulevard West / Gardiner Eastbound On Ramp / Gardiner Westbound Off Ramp / Brookers Lane

The Lake Shore Boulevard West / Gardiner Eastbound On Ramp / Gardiner Westbound Off Ramp / Brookers Lane signalized intersection currently operates with a cycle length of 100 seconds during the AM, PM and Saturday peak hours.

Under existing conditions the intersection operates with overall V/C ratios of 0.76, 0.65 and 0.45 during the AM, PM and Saturday peak hours respectively.

Under future background, the intersection is projected to operate with overall V/C ratios of 1.05, 1.20 and 0.69 during the AM, PM and Saturday peak hours respectively. The increased overall V/C during the AM and PM peak hours is primarily related to the eastbound left and southbound right turn movements, with a substantial projected increase in traffic to and from the Gardiner Expressway.

Under future total, the Gardiner Expressway ramps will be relocated to connect to the Relief Road, and the southbound approach at this intersection is proposed to serve as a driveway serving part of the Site. The existing eastbound left turn protected phase during the AM peak is proposed to be removed.

Subject to the above, the intersection is projected to operate with overall V/C ratios of 0.80, 0.70 and 0.51 during the AM, PM and Saturday peak hours respectively.

It is noted that in addition to the abovementioned changes, future background and future total signal timings were optimized to best accommodate projected future traffic demands.

Operations are projected to generally improve under future total, compared with future background primarily due to the removal of the Gardiner Expressway ramps from this location.
Overall, it is projected that future total traffic can be accommodated at this intersection, subject to the recommendations outlined above.

Lake Shore Boulevard West / Relief Road / The Marginal Boulevard

The Lake Shore Boulevard West / The Marginal Boulevard is an existing unsignalized intersection.

Under future total conditions, the intersection is proposed to be signalized, with a fourth southbound approach (Relief Road) to be constructed, and will serve as a key gateway to the Gardiner Eastbound On and Westbound Off Ramps. A cycle length of 140 seconds was adopted, consistent with the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersection.

Under future total, the intersection is projected to operate with overall V/C ratios of 0.85, 0.91 and 0.68 during the AM, PM and Saturday peak hours respectively.

Overall, it is projected that future total traffic can be accommodated at this intersection as proposed.

Relief Road / Gardiner Eastbound On Ramp/ Gardiner Westbound Off Ramp

Relief Road / Gardiner Eastbound On Ramp / Gardiner Westbound Off Ramp is a proposed new signalized intersection, to which the Gardiner Eastbound On and Westbound Off Ramps are proposed to be relocated. A cycle length of 140 seconds was adopted, consistent with the Lake Shore Boulevard West / Park Lawn Road / Marine Parade Drive intersection.

Under future total, the intersection is projected to operate with overall V/C ratios of 0.65, 0.74 and 0.60 during the AM, PM and Saturday peak hours respectively.

Overall, it is projected that future total traffic can be accommodated at this intersection as proposed.

TABLE 105: TRAFFIC OPERATIONS RESULTS – KEY SIGNALIZED INTERSECTIONS

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Park Lawn Rd / The Queensway[2]	**Overall**	**0.87 (0.92) [0.91]**	**D (D) [D]**	**41.8 (47.1) [41.3]**	**1.00 (1.10) [1.06]**	**D (E) [D]**	**53.5 (66.4) [54.7]**	**0.85 (0.94) [0.98]**	**D (D) [D]**	**41.6 (48.0) [48.4]**
	EBL	0.33 (0.77) [0.48]	C (D) [C]	22.5 (41.5) [25.7]	0.33 (0.67) [0.48]	C (C) [C]	21.6 (30.0) [25.8]	0.30 (0.60) [0.54]	C (C) [D]	22.6 (32.3) [35.8]
	EBTR	0.91 (0.97) [0.94]	D (E) [E]	49.4 (64.1) [58.3]	0.98 (1.10) [1.03]	E (F) [E]	61.5 (102.9) [79.3]	-		
	EBT	-			-			0.81 (0.92) [0.95]	D (E) [E]	41.4 (59.7) [69.4]
	EBR	-			-			0.14 (0.28) [0.26]	C (D) [D]	26.7 (38.0) [40.8]
	WBL[3]	0.78 (0.94) [0.87]	D (E) [D]	54.5 (71.8) [53.6]	0.96 (1.09) [1.02]	F (F) [F]	90.9 (116.0) [89.7]	0.77 (0.92) [0.96]	D (E) [E]	45.9 (64.3) [71.0]
	WBT	0.38 (0.54) [0.47]	C (C) [C]	21.5 (20.7) [24.5]	0.44 (0.61) [0.50]	C (C) [C]	26.9 (26.6) [26.4]	0.38 (0.62) [0.53]	C (C) [C]	24.2 (28.8) [30.8]
	WBR	0.03 (0.07) [0.05]	B (B) [B]	17.4 (14.9) [19.6]	0.03 (0.07) [0.05]	C (B) [C]	21.7 (18.7) [21.1]	0.03 (0.07) [0.06]	C (C) [C]	20.1 (20.5) [24.8]
	NBL	0.73 (0.78) [0.83]	D (E) [E]	48.1 (62.5) [56.4]	0.99 (1.03) [1.03]	F (F) [F]	89.3 (119.0) [100.4]	0.80 (0.91) [0.95]	E (F) [F]	60.1 (84.3) [80.3]
	NBT	0.42 (0.65) [0.42]	D (D) [D]	39.9 (51.5) [35.2]	0.51 (0.68) [0.48]	D (D) [C]	38.9 (51.3) [34.9]	0.52 (0.70) [0.55]	D (D) [D]	47.4 (54.6) [42.1]
	NBR	0.79 (0.64) [0.42]	D (C) [B]	37.8 (26.1) [16.1]	0.89 (0.67) [0.48]	D (C) [B]	47.4 (26.5) [16.7]	0.84 (0.58) [0.45]	D (C) [A]	42.6 (23.4) [5.9]
	SBL	0.36 (0.54) [0.25]	D (E) [D]	51.4 (63.6) [41.8]	0.41 (0.56) [0.27]	E (E) [D]	55.7 (65.5) [43.1]	0.38 (0.52) [0.28]	D (E) [D]	54.9 (63.1) [43.7]
	SBTR	0.56 (0.67) [0.56]	D (E) [D]	52.8 (57.7) [45.6]	0.64 (0.78) [0.63]	E (E) [D]	56.9 (62.2) [47.8]	0.67 (0.82) [0.76]	E (E) [D]	57.8 (64.4) [52.6]

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. Lane configurations change between analysis scenarios
3. Lost time adjustment calibrated to -2 seconds under existing conditions (all analysis periods) based on intergreen study - attached in Appendix F

TABLE 106: TRAFFIC OPERATIONS RESULTS – KEY SIGNALIZED INTERSECTIONS (CONT'D)

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Park Lawn Rd / Gardiner WB On Ramp / Ontario Food Terminal Dwy[4]	**Overall**	**0.65 (0.55) [0.37]**	**B (A) [A]**	**14.7 (4.1) [4.9]**	**0.88 (0.66) [0.49]**	**D (B) [B]**	**47.6 (10.1) [10.3]**	**0.84 (0.45) [0.51]**	**D (C) [C]**	**35.5 (22.0) [21.0]**
	WBLTR	0.76 (0.25) [-]	D (D) [-]	50.1 (42.2) [-]	0.76 (0.25) [-]	D (D) [-]	50.1 (42.2) [-]	0.90 (0.09) [-]	F (D) [-]	91.9 (52.7) [-]
	NBL[2,3]	0.80 (0.55) [0.63]	B (A) [A]	12.4 (3.7) [4.7]	1.20 (0.66) [0.78]	F (B) [B]	113.6 (11.3) [10.7]	0.84 (0.75) [0.77]	D (D) [D]	53.5 (52.7) [49.7]
	NBT	0.47 (0.34) [0.32]	A (A) [A]	4.9 (1.0) [3.5]	0.60 (0.38) [0.39]	B (A) [A]	10.7 (1.1) [3.9]	0.51 (0.41) [0.47]	A (A) [A]	8.5 (7.3) [5.6]
	SBT	0.20 (0.23) [0.18]	B (A) [A]	18.3 (5.9) [5.3]	0.29 (0.46) [0.35]	C (B) [B]	23.3 (17.0) [15.8]	0.33 (0.38) [0.42]	C (C) [C]	30.9 (21.3) [20.3]
	SBR	0.45 (0.35) [0.38]	C (A) [A]	23.0 (7.3) [7.3]	0.56 (0.35) [0.39]	C (B) [B]	30.0 (16.7) [17.3]	0.84 (0.46) [0.53]	D (C) [C]	49.6 (29.8) [24.8]

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. Lost time adjustment calibrated to -4 seconds under existing conditions (AM and Saturday peak) based on intergreen study - attached in Appendix X
3. Protected left turn phase introduced under future total with introduction of dual left turn lanes (all analysis periods)
4. Cycle length increased to 144 seconds (AM and PM peak) and 128 seconds (Saturday peak) under future total, consistent with adopted future total cycle length for the Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd / Relief Road intersection, discussed below

Table 107: Traffic Operations Results – Key Signalized Intersections (Cont'd)

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd *(Existing and Future Background)* **Park Lawn Rd / Gardiner EB Off Ramp / Legion Rd / Relief Rd** *(Future Total)*[2,4,5]	**Overall**	**0.60 (0.61) [0.55]**	**C (C) [B]**	**21.9 (23.7) [18.1]**	**0.89 (0.70) [0.72]**	**C (C) [B]**	**28.3 (22.9) [18.6]**	**0.75 (0.84) [0.94]**	**D (D) [D]**	**48.0 (41.8) [51.2]**
	EBL[6]	0.75 (0.57) [0.55]	D (C) [C]	36.7 (22.4) [28.4]		-		0.84 (0.71) [0.91]	E (D) [E]	57.4 (46.8) [70.7]
	EBLR		-		0.90 (0.87) [0.75]	D (C) [C]	42.0 (30.0) [29.4]		-	
	EBT		-			-		0.32 (0.28) [0.21]	C (B) [C]	33.1 (19.7) [20.5]
	EBR[3]	0.47 (0.90) [0.69]	C (D) [C]	31.1 (43.0) [33.8]	0.35 (0.87) [0.63]	C (D) [C]	25.3 (37.1) [27.9]	0.41 (0.84) [0.81]	C (C) [D]	34.9 (24.7) [39.2]
	WBL		-			-		0.23 (0.85) [0.90]	D (F) [E]	48.5 (88.3) [78.9]
	WBT		-			-		0.06 (0.07) [0.03]	D (D) [C]	53.1 (47.6) [34.5]
	WBR		-			-		0.57 (0.58) [0.55]	D (D) [C]	43.1 (43.2) [27.5]
	NBL	0.06 (0.21) [0.13]	A (B) [A]	8.3 (13.2) [7.4]	0.09 (0.43) [0.23]	B (C) [B]	11.4 (20.9) [11.1]	0.16 (0.22) [0.37]	D (C) [D]	38.6 (28.5) [44.8]
	NBT	0.53 (0.40) [0.49]	B (B) [A]	12.5 (14.0) [9.9]	0.88 (0.56) [0.71]	C (B) [B]	26.7 (18.0) [16.5]	0.86 (0.42) [0.88]	D (D) [D]	54.1 (45.0) [54.8]
	NBR		-			-		0.06 (0.07) [0.17]	D (D) [D]	36.5 (40.3) [38.1]
	SBL		-			-		0.40 (0.60) [0.94]	E (C) [F]	77.1 (33.7) [100.1]
	SBTR	0.11 (0.31) [0.21]	A (A) [A]	2.1 (8.0) [3.2]	0.17 (0.47) [0.31]	A (A) [A]	1.9 (7.9) [2.1]	0.14 (0.78) [0.32]	B (E) [C]	17.6 (56.9) [25.5]

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. Lane configurations change between analysis scenarios
3. Right turn on red saturation flow calibrated to 633 (PM peak) and 597 (Saturday peak) under existing conditions based on right turn on red study - attached in Appendix F
4. Cycle length increased to 144 seconds (AM and PM peak) and 128 seconds (Saturday peak) under future total to allow the additional time required to accommodate the addition of the Relief Road (and consistent with the Park Lawn Rd / The Queensway intersection)
5. Minimum walk time reduced to 7 seconds under future total to allow additional time to be allocated to the east-west movements (all analysis periods). Flash don't walk time maintained to ensure sufficient crossing time for pedestrians.
6. Protected left turn phase introduced under future total (PM peak)

TABLE 108: TRAFFIC OPERATIONS RESULTS – KEY SIGNALIZED INTERSECTIONS (CONT'D)

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Lake Shore Blvd W / Park Lawn Rd / Marine Parade Dr[2,3]	**Overall**	**0.61 (0.67) [0.64]**	**D (D) [D]**	**40.9 (51.6) [48.8]**	**0.92 (0.87) [0.92]**	**D (E) [D]**	**47.8 (59.9) [54.1]**	**0.65 (0.78) [0.89]**	**D (E) [E]**	**40.0 (56.1) [68.6]**
	EBL	0.57 (0.72) [0.80]	C (D) [D]	28.6 (41.2) [42.8]	0.95 (0.95) [1.10]	E (F) [F]	63.0 (85.9) [115.2]	0.80 (0.89) [0.98]	C (E) [E]	32.4 (61.1) [69.5]
	EBTR	0.60 (0.45) [0.35]	C (C) [C]	32.0 (30.8) [28.2]	0.76 (0.52) [0.45]	D (C) [C]	36.8 (31.3) [29.3]	0.58 (0.36) [0.31]	C (C) [B]	24.9 (20.1) [16.4]
	WBL	-			0.28 (0.06) [0.10]	D (D) [D]	53.4 (37.7) [41.6]	-		
	WBLT	0.40 (0.88) [0.63]	D (E) [D]	39.9 (61.1) [49.6]	-			0.41 (0.84) [0.74]	D (D) [D]	35.1 (40.0) [46.7]
	WBT	-			0.50 (0.99) [0.73]	D (E) [D]	46.7 (77.8) [53.6]	-		
	WBR	0.32 (0.40) [0.46]	B (B) [C]	16.1 (19.3) [21.9]	0.69 (0.55) [0.69]	C (C) [C]	29.1 (22.2) [29.6]	0.21 (0.09) [0.38]	E (D) [E]	70.4 (51.2) [75.0]
	NBL	-			-			0.16 (0.13) [0.15]	D (D) [D]	41.4 (41.1) [41.2]
	NBLT	0.43 (0.34) [0.30]	D (D) [D]	52.4 (49.1) [48.7]	0.75 (0.45) [0.49]	E (D) [D]	59.3 (50.5) [51.0]	-		
	NBT	-			-			0.29 (0.19) [0.20]	D (D) [D]	42.8 (41.5) [41.7]
	NBR	0.03 (0.03) [0.03]	D (D) [D]	48.3 (45.9) [46.0]	0.03 (0.03) [0.03]	D (D) [D]	47.1 (45.9) [46.0]	0.02 (0.01) [0.02]	D (D) [D]	39.6 (39.5) [39.6]
	SBL	0.70 (0.68) [0.60]	D (D) [D]	50.1 (47.9) [46.6]	0.93 (1.00) [0.86]	E (E) [D]	63.0 (76.0) [54.8]	0.65 (0.86) [0.87]	E (F) [F]	65.9 (86.2) [87.1]
	SBT	0.37 (0.24) [0.32]	D (D) [D]	42.1 (39.3) [41.4]	0.42 (0.37) [0.40]	D (D) [D]	39.1 (38.2) [40.0]	0.12 (0.11) [0.13]	C (C) [C]	21.8 (22.3) [28.4]
	SBR	0.17 (0.36) [0.40]	F (F) [F]	97.9 (118.4) [116.9]	0.12 (0.31) [0.35]	E (F) [F]	67.3 (91.0) [93.7]	0.23 (0.44) [0.57]	F (F) [F]	80.1 (131.6) [162.8]

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. Lane configurations change between analysis scenarios
3. Split phasing removed under future total (all analysis periods)

TABLE 109: TRAFFIC OPERATIONS RESULTS – KEY SIGNALIZED INTERSECTIONS (CONT'D)

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Lake Shore Blvd W / Brookers Ln / Gardiner EB On Ramp / Gardiner WB Off Ramp *(Existing and Future Background)* / **Lake Shore Blvd W / Brookers Ln / Dwy 3** *(Future Total)*[2]	**Overall**	**0.76 (0.65) [0.45]**	**B (C) [C]**	**19.5 (27.9) [21.1]**	**1.05 (1.20) [0.69]**	**E (F) [C]**	**66.2 (100.8) [28.4]**	**0.80 (0.70) [0.51]**	**D (C) [B]**	**25.0 (44.1) [12.7]**
	EBLTR[3]	0.75 (0.58) [0.43]	B (B) [A]	12.5 (13.4) [7.2]	1.12 (1.12) [0.69]	F (F) [C]	85.2 (90.0) [20.1]		-	
	EBTR		-			-		0.98 (0.89) [0.63]	D (C) [B]	
	WBL		-			-		- (0.02) [-]	- (B) [-]	
	WBLTR	0.07 (0.08) [0.07]	A (B) [A]	3.0 (16.8) [2.1]	0.08 (0.13) [0.07]	A (C) [B]	3.2 (22.3) [11.1]		-	
	WBT		-			-		0.06 (0.04) [0.05]	A (A) [A]	
	NBL	0.70 (0.44) [0.54]	D (C) [D]	44.5 (31.2) [39.8]	0.71 (0.27) [0.55]	D (B) [D]	45.4 (15.9) [37.3]	0.31 (0.18) [0.18]	C (C) [C]	44.1 (26.2) [36.7]
	NBTR	0.33 (0.07) [0.10]	C (C) [C]	34.1 (26.9) [34.2]	0.69 (0.12) [0.31]	D (B) [C]	41.2 (14.4) [32.3]	0.03 (0.02) [0.02]	C (C) [C]	33.2 (24.8) [32.8]
	SBLT	0.35 (0.54) [0.56]	C (C) [D]	34.5 (32.4) [39.7]	0.70 (0.45) [0.69]	D (B) [D]	47.5 (17.6) [41.0]		-	
	SBLTR		-			-		0.08 (0.02) [0.04]	C (C) [C]	
	SBR	0.22 (0.81) [0.40]	C (D) [D]	33.1 (45.0) [36.9]	0.30 (1.27) [0.63]	C (F) [D]	33.4 (158.2) [38.2]		-	

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. Lane configurations change between analysis scenarios
3. Protected left turn phase removed for this movement under future total with the relocation of the Gardiner ramps (AM peak)

TABLE 110: TRAFFIC OPERATIONS RESULTS – KEY SIGNALIZED INTERSECTIONS (CONT'D)

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Lake Shore Blvd W / The Marginal Blvd *(Existing and Future Background)* **Lake Shore Blvd W / The Marginal Blvd / Relief Rd** *(Future Total)*	**Overall**	N/A²			N/A²			**0.85 (0.91) [0.68]**	**C (C) [E]**	**30.7 (28.0) [66.0]**
	EBL							0.59 (0.18) [0.39]	B (A) [B]	13.3 (5.1) [11.4]
	EBTR							0.87 (0.75) [0.68]	C (B) [B]	21.9 (19.0) [19.3]
	WBTR							0.35 (0.29) [0.30]	C (D) [D]	28.2 (44.7) [40.5]
	NBL							0.13 (0.03) [0.03]	D (D) [B]	44.8 (43.5) [17.9]
	NBTR							0.27 (0.06) [0.05]	D (D) [B]	46.2 (43.9) [18.0]
	SBL							0.70 (0.75) [0.65]	D (D) [B]	36.6 (47.3) [18.7]
	SBT							0.07 (0.15) [0.08]	C (D) [B]	22.5 (35.1) [12.5]
	SBR							0.21 (0.92) [0.50]	F (C) [F]	88.2 (28.7) [172.2]

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. Intersection is unsignalized under existing and future background

TABLE 111: TRAFFIC OPERATIONS RESULTS – KEY SIGNALIZED INTERSECTIONS (CONT'D)

Intersection	Movement	Existing			Future Background			Future Total		
		V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay
Relief Rd / Gardiner EB On Ramp / Gardiner WB Off Ramp	**Overall**	N/A[2]			N/A[2]			**0.65 (0.74) [0.60]**	**C (C) [C]**	**34.0 (30.3) [31.8]**
	WBL							0.67 (0.78) [0.81]	E (C) [D]	57.1 (33.7) [50.4]
	WBR							0.26 (0.52) [0.41]	D (C) [D]	50.6 (27.0) [39.7]
	NBTR							0.37 (0.13) [0.19]	C (B) [A]	34.7 (11.5) [1.8]
	SBL							0.62 (0.70) [0.50]	B (D) [B]	12.8 (41.5) [18.5]
	SBT							0.14 (0.27) [0.20]	A (C) [B]	4.5 (22.6) [11.9]

Notes:
1. xx (xx) [xx] – AM Peak (PM Peak) [SAT Peak]
2. New intersection under future total

10.0 ACTIVE TRAVEL ASSESSMENT

This section provides a review of the pedestrian and cycling conditions in the area today and in the future with the delivery of the Site and additional transportation infrastructure.

10.1 PEDESTRIAN ASSESSMENT

10.1.1 Existing Pedestrian Conditions

Existing Facilities

The Site is located in the vicinity of a number of recreational facilities and trails. A number of parks, including the Humber Bay Shores Park, the Humber Bay Park East and West Parks, and the Jean Augustine Park, are located within 750 metre walking distance of the Site.

The Martin Goodman Trail, located south of the Site, runs along the shoreline of Lake Ontario and provides connections to recreational areas to the east.

North-south connectivity in the area is constrained, due to large infrastructure in the area, including the Gardiner Expressway and the Metrolinx rail corridor. East-west movement is also constricted on the north side of Lake Shore Boulevard at the northeast corner of the Site, as no sidewalk is provided along this segment of the corridor.

Currently, the Site itself is a large, impermeable block that lacks connection to its surroundings. Additionally, few mid-block crossing opportunities exist on Park Lawn Road and Lake Shore Boulevard along the Site property line, which is detailed further in the Signal Spacing overview.

Some images illustrating existing pedestrian conditions are provided in **Figure 94**.

Signal Spacing

Within the vicinity of the Site, there are three marked crossing opportunities along Park Lawn Road:

- Intersection of Park Lawn Road / Gardiner Expressway Off-Ramp (Signalized)
- Intersection of Park Lawn Road / Metro Driveway (Signalized)
- Intersection of Park Lawn Road / Lake Shore Boulevard (Signalized)

There are approximately 340 metres between the Gardiner Expressway Off-Ramp and the Metro Driveway intersections, providing minimal opportunities for mid block crossings.

Along Lake Shore Boulevard, there are three marked crossing opportunities:

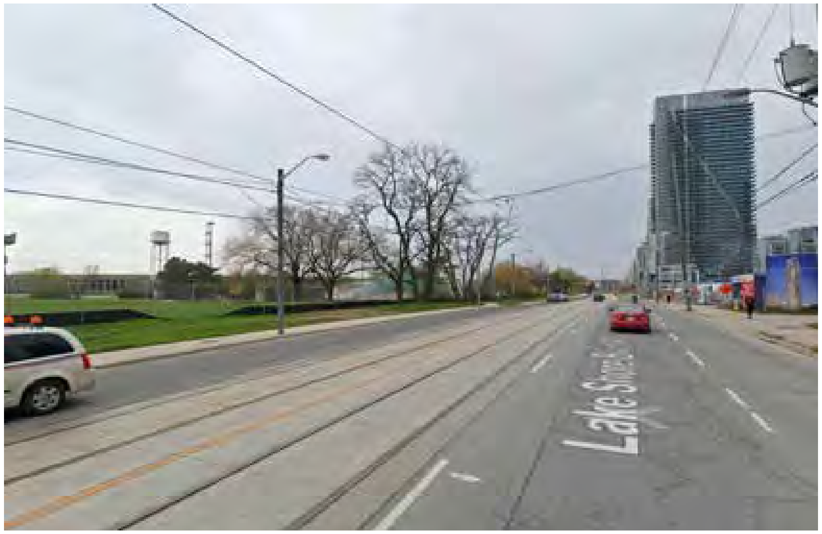
- Intersection of Park Lawn Road / Lake Shore Boulevard (Signalized)
- Intersection of Lake Shore Boulevard / Existing Site Driveway (Signalized)
- Intersection of Lake Shore Boulevard / Brookers Lane (Signalized)

There are approximately 350 metres between the Park Lawn Road and the existing Site driveway intersections, providing minimal opportunities for mid block crossings.

Pedestrian Volumes

In the order of 200 pedestrians walk along Lake Shore Boulevard West in the morning, afternoon and Saturday peak hours, and in the order of 100 pedestrians walk along Park Lawn Road in the morning, afternoon and Saturday peak hours.

FIGURE 94A EXISTING PEDESTRIAN CONDITIONS



LAKE SHORE BOULEVARD WEST - LOOKING NORTHWARD

LAKE SHORE BOULEVARD WEST - LOOKING SOUTHWARD

PARK LAWN ROAD - LOOKING NORTHWARD


PARK LAWN ROAD - LOOKING NORTHWARD

FIGURE 94B EXISTING PEDESTRIAN CONDITIONS

10.1.2 Future Pedestrian Conditions

Future Facilities

The Project proposes a fine-grained network of internal streets, as well as some internal pedestrian pathways in order to create a more permeable Site by breaking up the block sizes and establishing new pedestrian routes that will facilitate and encourage walking to / from the Site. The streets are proposed to align with existing streets along Lake Shore Boulevard and Park Lawn Road, to link with the existing pedestrian networks.

The project proposes to add a number of signalized intersections to both Park Lawn Road and Lake Shore Boulevard, reducing distances between pedestrian crossings, establishing new mid-block crossings and making the wider area more permeable from a pedestrian standpoint.

The development of the Site will also transform the public realm with improvements to the streetscape and sidewalk. Pedestrian activity in the area will increase as a result of the development and improved pedestrian connections.

Future Pedestrian Volumes

Direct pedestrian trips are made solely by walking and can be either primary trips or pass-by trips, and are associated with the Site and local area development. Internal interaction trips and linked trips occur between Site and area development within the Site or the immediate local area. In addition, walking trips will be made to and from the proposed GO Station and transit hub by Site and local area development, whilst transfers to/from the GO platforms will be undertaken by GO train passengers arriving at the station from further afield via local transit, pick up/drop off or bicycle.

In total, approximately 9,100, 10,800 and 10,075 pedestrian trips are projected during the morning, afternoon and Saturday peak hours, respectively, inclusive of internal trips, transit-based trips, trips associated with local area development, and transfers to/from the GO platforms.

The Site uses themselves are projected to generate in the order of 4,845, 6,865 and 6,135 pedestrian trips during the morning, afternoon and Saturday peak hours respectively, inclusive of internal trips and transit-based trips, trips associated with local area development and transfers to/from the GO platforms.

The distribution of primary pedestrian trips was based on the person trip distribution outlined in **Section 5.0** and was primarily to South Etobicoke. The following specific distribution was assumed:

- 50% to / from the north of the Site along Park Lawn Road;
- 50% to / from the west of the Site along Lake Shore Boulevard West;

Pass-by pedestrian trips were assumed to occur equally from Park Lawn Road and Lake Shore Boulevard West.

The total pedestrian activity is summarized in **Table 112** and illustrated in **Figure 95.**

TABLE 112 PROJECTED FUTURE PEDESTRIAN ACTIVITY

Land Use	Inbound	Outbound	Two-Way
Primary Site Trips			
Site Residential	5 (10) [5]	15 (5) [10]	20 (15) [15]
Site Office	20 (0) [0]	0 (20) [0]	20 (20) [0]
Site Retail	10 (20) [55]	0 (20) [55]	10 (40) [110]
Site Hotel	0 (0) [0]	0 (0) [0]	0 (0) [0]
Total Site	**35 (30) [60]**	**15 (45) [65]**	**50 (75) [125]**
Local Area Residential	5 (15) [10]	20 (5) [15]	25 (20) [25]
Total Primary	**40 (45) [70]**	**35 (50) [80]**	**75 (95) [150]**
Site Internal Trips			
Site Residential	150 (265) [250]	220 (240) [255]	370 (505) [505]
Site Office	55 (10) [10]	5 (50) [5]	60 (60) [15]
Site Retail	480 (600) [615]	400 (595) [605]	880 (1,195) [1,220]
Site Hotel	20 (20) [20]	15 (15) [15]	35 (35) [35]
Total Site	**705 (895) [895]**	**640 (900) [880]**	**1,345 (1,795) [1,775]**
Local Area Residential	225 (350) [340]	290 (345) [355]	515 (695) [695]
Total Internal	**930 (1,245) [1,235]**	**930 (1,245) [1,235]**	**1,860 (2,490) [2,470]**
Site Linked Trips			
Site Retail	520 (1,325) [885]	520 (1,325) [885]	1,040 (2,650) [1,770]
Pass-by Trips			
Site Retail	0 (10) [20]	0 (10) [20]	0 (20) [40]

Land Use	Inbound	Outbound	Two-Way
Transit-based Pedestrian Trips			
Site Residential	330 (1,095) [695]	1,530 (490) [885]	1,860 (1,585) [1,580]
Site Office	280 (40) [30]	40 (260) [40]	320 (300) [70]
Site Retail	35 (130) [295]	15 (130) [300]	50 (260) [595]
Site Hotel	85 (85) [85]	95 (95) [95]	180 (180) [180]
Total Site	**730 (1,350) [1,105]**	**1,680 (975) [1,320]**	**2,410 (2,325) [2,425]**
Local Area Residential	395 (1,350) [845]	1,860 (590) [1,065]	2,255 (1,940) [1,910]
Greater Area Residential	15 (55) [35]	75 (30) [50]	90 (85) [85]
Transfers to/from GO	260 (800) [530]	1,110 (395) [695]	1,370 (1,195) [1,225]
Total Transit-based	**1,400 (3,555) [2,515]**	**4,725 (1,990) [3,130]**	**6,125 (5,545) [5,645]**
Total Trips			
Site Residential	485 (1,370) [950]	1,765 (735) [1,150]	2,250 (2,105) [2,100]
Site Office	355 (50) [40]	45 (330) [45]	400 (380) [85]
Site Retail	1,045 (2,085) [1,870]	935 (2,080) [1,865]	1,980 (4,165) [3,735]
Site Hotel	105 (105) [105]	110 (110) [110]	215 (215) [215]
Total Site	**1,990 (3,610) [2,965]**	**2,855 (3,255) [3,170]**	**4,845 (6,865) [6,135]**
External to Site	900 (2,570) [1,760]	3,355 (1,365) [2,180]	4,255 (3,935) [3,940]
Total Trips	**2,890 (6,180) [4,725]**	**6,210 (4,620) [5,350]**	**9,100 (10,800) [10,075]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

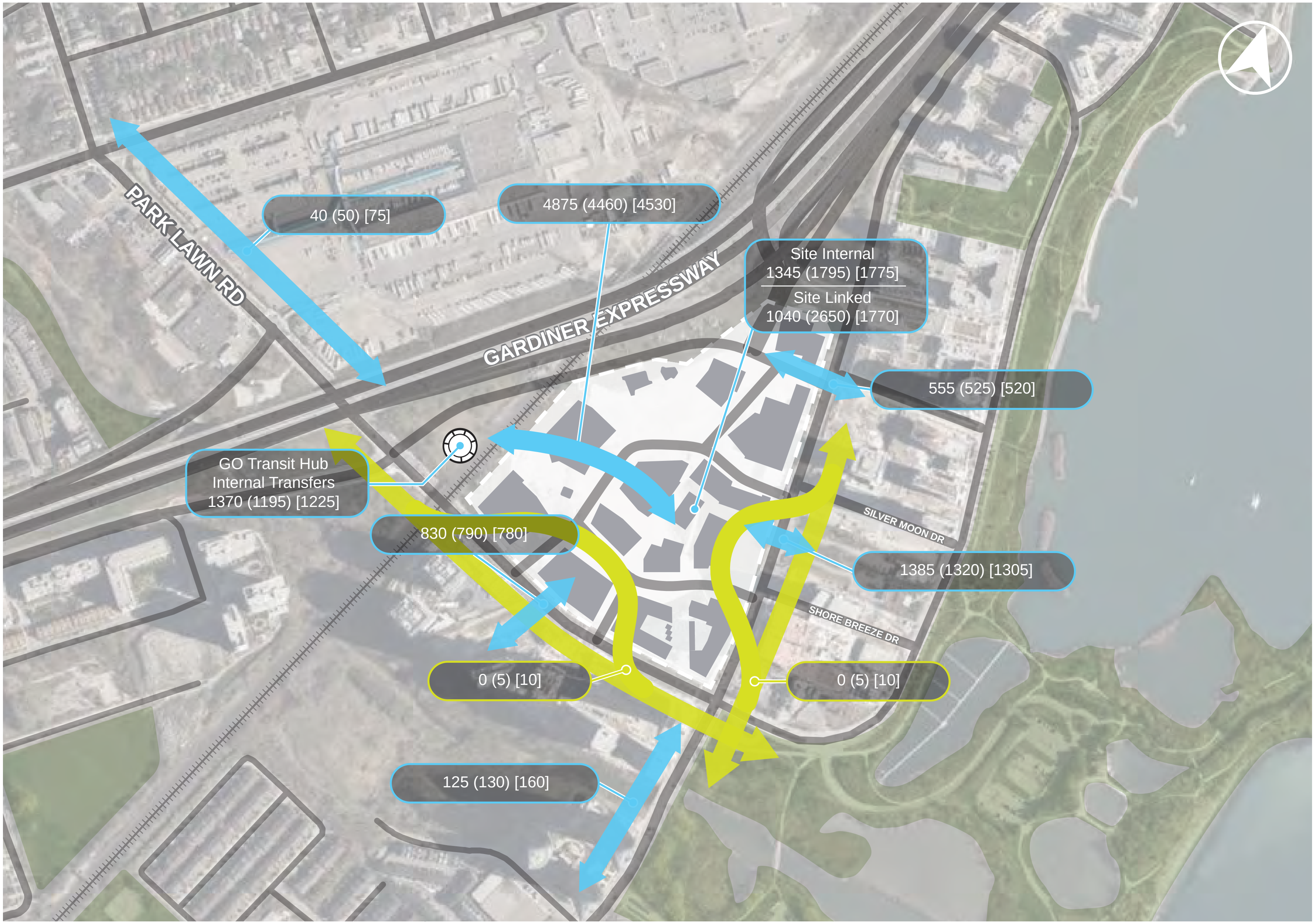


FIGURE 95 FUTURE PEDESTRIAN CONDITIONS

10.1.3 Pedestrian Assessment Summary

BA Group has undertaken a general review of the area pedestrian system and facilities, under both existing and future conditions.

10.1.3.1 Review Criteria

The review considered the following assessment criteria:

Walking:

- Pedestrian facilities are wide enough to allow pedestrians to walk and pass comfortably with expected pedestrian volumes; Walking paths have minimal and manageable interaction with vehicular crossings (i.e. Driveways, laneways, etc.);
- Adequate lighting is provided along pedestrian facilities; and
- Width of sidewalks, walkways, stairs, ramps and other pedestrian facilities is maintained during winter/snow removal conditions.

Waiting:

- Pedestrian waiting facilities provided at intersections should be designed to accommodate the volume of pedestrians expected to accumulate between crossing cycles and minimize pedestrians' exposure to hazards; and
- Actuated/callable pedestrian signals are provided at signalized crossings.

Crossing:

- Formal pedestrian crossings are provided at the intersections or desired locations of crossing;
- Formal crossings in the area pedestrian network provide efficient routes for pedestrians to cross to reach desired destinations and discourage jay-walking or informal crossings; and
- Crosswalks are wide enough to accommodate expected two-way crossings volumes.

Connecting:

- Pedestrian facilities make up a well-connected network providing a high level of area coverage without "gaps" or disconnected links in the network; and
- Pedestrian facilities provide efficient routes between key destinations.

Accessible:

- Pedestrian facilities are available to all regardless of age or ability and are designed to be accessible, where possible, and practical.

10.1.3.2 Evaluation Results

Walking:

- Under existing conditions, portions of Park Lawn Road have insufficient sidewalk widths of less than 2 metres
- With redevelopment of the Site, sidewalks with appropriate widths will be provided
- The Master Plan will provide pedestrian only walking areas

Waiting/Crossing:

- Formal pedestrian crossings exist at signalized intersections
- Distance between some existing intersections is in the order of 300 - 400 metres.
- Additional intersections with pedestrian crosswalks along Park Lawn Road and Lake Shore Boulevard West are proposed as part of the Master Plan, reducing distances between crossing opportunities and increasing pedestrian permeability to the wider area

Connecting:

- Current network lacks pedestrian crossing opportunities, particularly mid-block connections and through the Site itself
- Portions of Lake Shore Boulevard West do not contain sidewalks on the north side adjacent to the Site
- The existing Site is a large impermeable block that does not facilitate or encourage pedestrian movement
- Provision of new streets will improve pedestrian connectivity throughout the Site and the wider area
- Increased pedestrian network efficiency afforded by the introduction of additional public spaces and internal pedestrian paths

Accessible:

- Under future conditions, all intersections abutting the Site will include features to accommodate all patrons regardless of age or ability
- Accesses to Site buildings will be designed as per appropriate accessibility standards

10.2 CYCLING ASSESSMENT

10.2.1 Existing Cycling Conditions

Existing Facilities

The existing cycling network in the vicinity of the Site is oriented along the Lake Ontario waterfront, with the Martin Goodman Trail providing an important and well-used facility for recreational and commuter travel. There are some geographic constraints as well as constraints created by the large infrastructure in the area, including the Gardiner Expressway and the Metrolinx rail corridor, that currently limit bicycle connectivity between the Site and the areas to the north.

North of the Gardiner Expressway, there are bicycle sharrows on Park Lawn Road and bicycle lanes on the Queensway, east of Stephen Drive. However, access to these routes is restricted based on the constraints that were previously mentioned and the lack of north-south cycling connections in the vicinity of the Site.

Development of the Site provides opportunities to make better cycling connections between the Site and the Martin Goodman Trail and the surrounding neighbourhoods.

End of Trip Facilities

There is currently a Bike Share station just south of the Site on Marine Parade Drive and two other stations within 1 km of the Site. The Bike Share station will encourage area residents, employees and visitors to cycle to / from the Site and wider area as the bikes can be rented as needed and the bike can be returned at the end of the trip in a station that is convenient for them to access from the Site.

Cycling Volumes

In the order of 10 cyclists currently travel along Lake Shore Boulevard West and Park Lawn Road in the morning, afternoon and Saturday peak hours.

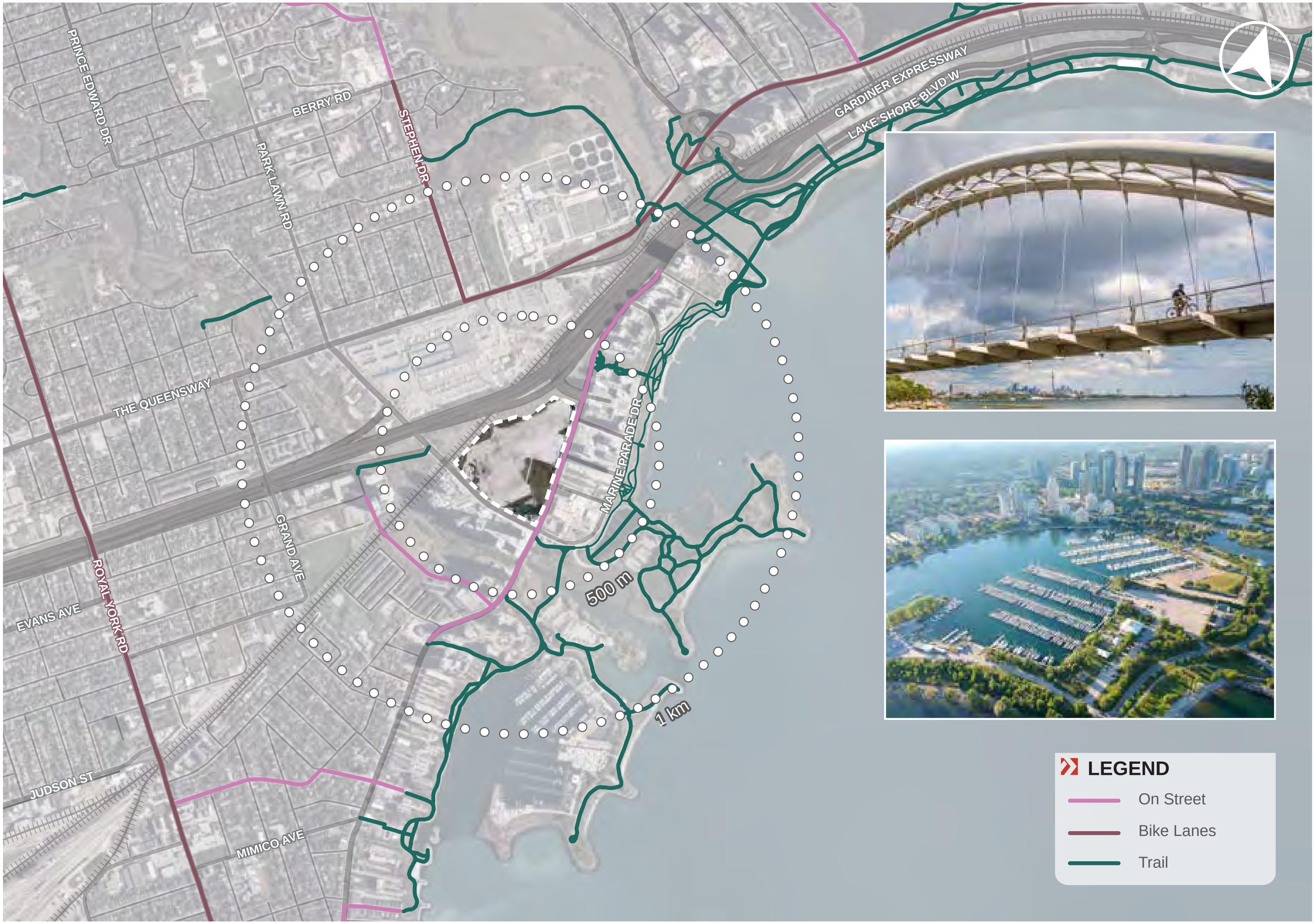


FIGURE 96 EXISTING CYCLING CONDITIONS

10.2.2 Future Cycling Conditions

The Project proposes a network of internal streets which will be fine-grained to increase the opportunity for active transportation connections by creating more permeable block sizes. The proposed internal road network, comprised of public and private roads, will incorporate new cycling infrastructure. Furthermore, with the redesign, or "re-imagination," of Lake Shore Boulevard following the creation of the Relief Road, the Master Plan proposes the addition of on-street cycling facilities along the Lake Shore Boulevard corridor.

The internal streets are proposed to align with existing streets along Lake Shore Boulevard, acting as gateways to and from the Martin Goodman Trail to the south.

Park Lawn Road, with the redevelopment of the Site, will add cycling facilities in order to facilitate north-south connections

The internal roads will have cycling facilities, providing direct cycling access to the proposed Park Lawn GO Station bicycle storage facilities, encouraging area residents, employees and visitors to cycle to station.

There are plans for improvements to the active transportation network in the area within the City of Toronto's 2019-2021 Implementation Program. This includes extending the Mimico Creek trail south towards Lake Shore Boulevard. Additionally, the portion of the Humber Bay Park Trail / Martin Goodman Trail within the vicinity of the Site is included as part of the renewed program, and will be improved in the next three years.

End of Trip Facilities

At the proposed Park Lawn GO Station, bicycle parking facilities will be provided with convenient access to and from the internal roads and station entrances.

Below grade bicycle parking facilities will also be provided within the Master Plan for each block. Access to the parking facilities will be located in close proximity to the entrances of buildings that the facility is intended to serve. In addition to bicycle parking, shower and change facilities will also be provided for retail and office uses.

Cycling Volumes

Direct cycling trips are made solely by bicycle and can be either primary trips or pass-by trips, and are associated with the Site and local area development. In addition, cycling trips will be made to and from the proposed GO Station and transit hub by area development.

In total, approximately 680, 645 and 695 cycling trips are projected during the morning, afternoon and Saturday peak hours, respectively, inclusive of transit-based trips and trips associated with local area development.

The Site uses themselves are projected to generate in the order of 245, 270 and 330 cycling trips during the morning, afternoon and Saturday peak hours respectively.

The distribution of primary cycling trips was based on the person trip distribution outlined in **Section 5.0** and was primarily to Downtown Toronto, with a small percentage to South Etobicoke. The following specific distribution was assumed:

- 95% to / from the east of the Site along Martin Goodman Trail;
- 5% to / from the west of the Site along Lake Shore Boulevard West;

Pass-by cycling trips were assumed to occur equally from Park Lawn Road and Lake Shore Boulevard West.

The total cycling activity is summarized in **Table 113** and illustrated in **Figure 97**.

TABLE 113 PROJECTED FUTURE CYCLING ACTIVITY

Land Use	Inbound	Outbound	Two-Way
Primary Site Trips			
Site Residential	30 (110) [75]	155 (50) [90]	185 (160) [165]
Site Office	35 (0) [0]	0 (35) [0]	35 (35) [0]
Site Retail	10 (20) [55]	0 (20) [55]	10 (40) [110]
Site Hotel	10 (10) [10]	5 (5) [5]	15 (15) [15]
Total Site	**85 (140) [140]**	**160 (110) [150]**	**245 (250) [290]**
Local Area Residential	40 (155) [90]	215 (70) [125]	255 (225) [215]
Total Primary	**125 (295) [230]**	**375 (180) [275]**	**500 (475) [505]**
Pass-by Trips			
Site Retail	0 (10) [20]	0 (10) [20]	0 (20) [40]

Land Use	Inbound	Outbound	Two-Way
Transit-based Cycling Trips			
Local Area Residential	20 (70) [45]	100 (30) [55]	120 (100) [100]
Greater Area Residential	10 (35) [20]	50 (15) [30]	60 (50) [50]
Total Transit-based	**30 (105) [65]**	**150 (45) [85]**	**180 (150) [150]**
Total Trips			
Site Residential	30 (110) [75]	155 (50) [90]	185 (160) [165]
Site Office	35 (0) [0]	0 (35) [0]	35 (35) [0]
Site Retail	10 (30) [75]	0 (30) [75]	10 (60) [150]
Site Hotel	10 (10) [10]	5 (5) [5]	15 (15) [15]
Total Site	**85 (150) [160]**	**160 (120) [170]**	**245 (270) [330]**
Local Area Residential	60 (225) [135]	315 (100) [180]	375 (325) [315]
Greater Area Residential	10 (35) [20]	50 (15) [30]	60 (50) [50]
Total Trips	**155 (410) [315]**	**525 (235) [380]**	**680 (645) [695]**

Notes:
1. XX (XX) [XX] = AM Peak (PM Peak) [SAT Peak]

FIGURE 97 FUTURE CYCLING CONDITIONS

10.2.3 Cycling Assessment Summary

BA Group has undertaken a general review of the area cycling system and facilities, under both existing and future conditions.

10.2.3.1 Review Criteria

The review considered the following assessment criteria:

Bicycle Parking:

- The Site must have an adequate bicycle parking supply, inclusive of short-term bicycle parking that is located in highly visible and publicly accessible locations.

Sharing:

- Bike Share Toronto facilities can be conveniently located on-Site or in close proximity; bike sharing is especially preferable adjacent to, or located in close proximity to, higher order transit stations.

Connecting:

- It is beneficial if the Site is well-connected as part of the City of Toronto's cycling network via infrastructure that is safe, convenient, and has high capacity; and
- Protected bike lanes (i.e. cycle tracks) and multi-use paths are preferable in this regard.

Support:

- Bicycle repair stations provided on-Site are an amenity that adds convenience to local cycling; and
- At local buildings, important information regarding cycling routes, amenities, and safety tips should be shared to spread awareness and to promote cycling.

10.2.3.2 Evaluation Results

Cycling Volumes

- The cycling volumes are currently low as a result of the lack of cycling infrastructure in the area
- In combination with the City's planned cycling improvements, the Site's planned cycling network is anticipated to support the forecast cycling trips resulting from the proposed development

Parking / Sharing:

- Existing Toronto Bike Share Station located near the Site
- Bicycle parking will be provided for Park Lawn GO Station with direct access proposed from the Relief Road
- Bicycle parking will be weather protected, provided for each block, and the accesses will be in close proximity to the buildings they are meant to serve

Connecting:

- The proposed Master Plan introduces improved bike lanes on Lake Shore Boulevard and Park Lawn Road, as well as along internal streets and the Relief Road
- The Relief Road and internal network will connect the Site with the wider area cycling network and the planned Park Lawn GO Station to make cycling in the area a more viable alternative
- The City has planned improvements to the cycling infrastructure in the area as part of the City of Toronto's 2019-2021 Implementation Program

Support:

- Provision of bicycle repair station on Site within the bicycle parking facilities may be proposed with a future Site plan application to the City
- Provision of change and shower facilities will also be provided within Site bicycle parking facilities

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